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**To:** Board of Environmental Protection

**From:** Tom Graham, *Policy Specialist*  
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**Date:** July 17, 2025

**Re:** Chapter 90: *Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances*

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The Department seeks to initiate rulemaking to amend its rule *Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances*, 06 096 C.M.R. ch. 90 (Chapter 90) to include currently unavoidable use (CUU) determinations.

#### Regulatory Framework

The objective of Maine law *Products Containing PFAS*, 38 M.R.S. §1614, is to reduce the potential for environmental contamination by and human exposure to perfluoroalkyl and polyfluoroalkyl substances (PFAS) by eliminating their non-essential use in products through sales prohibitions. Where the use of PFAS is critical to a product that is determined to be essential for health, safety or the functioning of society, and for which alternatives are not reasonably available, the Legislature has provided for CUU determinations by the Department through routine technical rulemaking. “Essential for health, safety or the functioning of society” is defined as a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies.

This rulemaking is focused on the limited scope of the prohibited use of intentionally added PFAS in the following product categories:

- Cleaning Product
- Cookware Product
- Cosmetic Product
- Dental Floss
- Juvenile Product
- Textile articles (with exception)
- Ski Wax
- Upholstered Furniture
- Fluorinated containers, or containers that otherwise contain intentionally added PFAS, from any of these categories of products included in the 2026 sales prohibition.

The Department considered whether the use of PFAS in the product is necessary for the product to perform as intended, with particular attention to whether the absence of the PFAS used has the potential to result in the product becoming unavailable and creating any of the negative outcomes detailed in the definition of “Essential for health, safety and the functioning of society.”

Similarly, within the category of container, the Department also weighed the necessity of PFAS use in the container with the ability of the container to function properly without the use of PFAS.

Once designated a currently unavoidable use, manufacturers continuing the use of intentionally added PFAS in specific CUU product categories must meet the notification requirements found in Chapter 90 prior to sales in Maine beyond the prohibition effective date.

On April 7, 2025, the Board adopted Chapter 90, in part, to establish criteria for such determinations. Recognizing that it was not possible to adopt CUU determinations for January 1, 2026, sales prohibitions using the rule’s general timeline for CUU submissions of no less than 18 months prior to the start of a sales prohibition and based on a projected rulemaking timeline, a June 1, 2025, deadline for submission of CUU proposals was established.

## Rule Development

Considering ease of use by the regulated community and internal data management, the Department established an online submission form for CUU proposals. This mechanism guides users through a series of questions that form important data points for the Department, as established in rule Chapter 90.

The Department has received 11 CUU proposals for consideration in the following product categories: cookware product (5 proposals), cleaning product (4 proposals), cosmetic product container (1 proposal), upholstered furniture (1 proposal).

Based on the information provided within CUU proposals submitted through the online reporting system, the Department makes the following recommendations:

### **Cookware Category**

Proposals: HQC-ZF13-Y8K4R; HQC-ZR29-9YFEB; HQC-JS1V-7C75E

Product Description: Cookware and bakeware

All three of these proposals request a CUU determination for polytetrafluoroethylene (PTFE) as a coating that comes in contact with food on cookware surfaces for its non-stick behavior, chemical and abrasion resistance, resistance to heat and corrosion, and long-lasting product performance. Each proposal states that these properties are essential for consumers' health and safety when cooking due to the resulting low or no fat use during cooking, predictable results by preserving food texture, prevention of burning, and easy clean-up which reduces detergent and water use.

Alternatives: Those identified within the proposal are commonly known and readily available.

[Portions of specific identification and performance information within this section are claimed as confidential business information.]

Recommendation: Based on the lack of evidence that this product meets the statutory definition of essential for health, safety and the functioning of society, and that reasonably available

alternatives that function similarly are readily obtainable by consumers, the Department does not recommend approving the CUU proposals for the use of PFAS in cookware.

Proposal: HQC-ZH6A-HQE84

Product Description: Cookware, small kitchen appliances

This proposal requests a CUU determination for fluoropolymer-coated small kitchen appliances. Submitter states that fluoropolymers, particularly PTFE, are essential components for this product category for its inherent non-stick behavior, resistance to chemicals, abrasion, heat, and corrosion. The proposal states these features ensure the long-term effectiveness of small kitchen appliances and support healthier cooking practices by reducing the need for added fats and enabling easier cleaning. The submitter describes performance characteristics provided by the fluoropolymers in this product ensure durability of small kitchen appliances, ultimately offering a longer product lifespan.

Alternatives: The proposal states that cast iron, stainless steel and raw aluminum do not possess natural non-stick capabilities. The proposal states that ceramic coatings are mistakenly regarded as a suitable substitute, though they lack non-stick durability and overall performance over time. Because of this, ceramic-coated appliances often wear out faster and need replacement sooner.

Recommendation: Based on the lack of evidence that this product meets the statutory definition of essential for health, safety and the functioning of society, and that reasonably available alternatives that function similarly are readily obtainable by consumers, the Department does not recommend approving the CUU proposals for the use of PFAS in this type of cookware.

Proposal: HQC-XVWW-DVJ0F

Product Description: Coffee maker

This proposal requests a CUU determination for PFAS compounds intentionally added to component parts of coffee makers such as tubing, gaskets, solenoid valves, and vibrating pumps. PFAS use in this product is described as essential for chemical stability, resistance to high pressure, durability, maintenance through high temperatures, and long-lasting non-stick and self-lubricating properties. The proposal states that the properties provided by intentionally added PFAS are essential for consumers' health and safety when using the product because it can be

“...more cost-effective than purchasing coffee from outside sources as consumers can choose the type of coffee, quantity, and minimize waste.”

Alternatives: Those identified within the proposal include silicone, non-PFAS polymers, and ceramics which are commonly known and readily available. However, submitter states that these alternatives do not offer the same combination of properties such as resistance to high pressure and temperature, as well as resistance to friction. Problems associated with use of these alternatives are identified as tubing that dries out and becomes brittle over time, which could create leakage and decrease product lifespan.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving the CUU proposal for the use of PFAS in this type of cookware.

## **Cleaning Product**

Proposal: HQC-ZKB4-SGASS

Product Description: Liquid Cleaner Container – Internal cartridge valve

This proposal requests a CUU determination for PFAS compounds in component parts of a container valve located at the top of the internal cartridge. The vent described is designed to withstand chemical compatibility challenges posed by highly corrosive formulations and associated off gassing of the liquid cleaning product within the container. The submitter states that PFAS used in this component allows for delicate and finely tuned mechanical interaction that helps repel aggressive substances and maintain performance integrity. The vent controls the dilution ratio of concentrated cleaners held within the container, ensuring control of the dilution ratio of concentrated cleaners. The proposal states that the properties provided by intentionally added PFAS are essential for consumers’ health and safety when using the product because controlled dilution is critical to efficacy and limited exposure to concentrated cleaners held within the container.

Alternatives: Submitter states there are none currently available that are adequate to meet performance criteria for this product.

Recommendation: Because this component of the container performs a vital role for the product within it to function properly and concern for consumer safety should this container valve fail, the Department recommends approval of this CUU proposal.

Proposal: HQC-ZR7R-6N0MY

Product Description: Electric Air Care Product Components

This proposal requests a CUU determination for PFAS compounds in internal component parts of an electric fragrance warmer. Within tubes located in the resistor assembly, PFAS are used to provide a flame-retardant barrier around conductive elements, protect against high temperatures, humidity, and mechanical stress. The submitter describes the PFAS compound used as critical as a protective barrier to prevent human contact with live electrical parts, resist fatigued wiring wear over time, as well as reduce risk of short circuits. The proposal states that the properties provided by intentionally added PFAS are essential for consumers' health and safety to prevent insulation failure, reduce risk of short circuits, prevent human contact, and overheating or fire.

Alternatives: The proposal states that silicone is an alternative that offers flexibility and heat resistance, it typically does not meet the full performance profile criteria for this product; particularly, chemical resistance and long-term endurance.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

Proposal: HQC-ZQJK-QWWN2

Product Description: Electric Air Care Product Plug-In

This proposal requests a CUU determination for PFAS compounds in internal component parts of an electric air freshener. Within the plug deck of the device, PFAS is used to coat the wiring jackets. The submitter describes PFAS compounds in this component providing a flame-retardant barrier around stranded copper conductors, provide resistance to heat, cold, humidity, and mechanical stress, as well as preventing insulation failure that could lead to short circuits or fires.

The proposal states use of PFAS in this product is essential for electrical safety and prevention of human contact with live electrical parts, reducing the risk of electric shock.

Alternatives: The proposal states that silicone is an alternative that offers flexibility and heat resistance, it typically does not meet the full performance profile criteria for this product; particularly, chemical resistance and long-term endurance.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

Proposal: HQC-J9ZH-K4EZJ

Product Description: Container Vented Cap Liners

This proposal requests a CUU determination of PFAS compounds in components of a container. Specific to vented cap liners of foam and induction foils, the submitter states that intentionally added PFAS allows lighter weight packaging, higher concentration of active ingredients, and more effective products. The submitter describes the PFAS applied to finished cap liner vents specific to this proposal are components of containers for several product categories, such as cleaning products, haircare products, and liquid chemicals. The proposal states that these vents provide the necessary function of safely allowing off gassing from the containers across all three product categories, which avoids containment failure.

Alternatives: The proposal states that alternatives such as polypropylene membranes, cellulose acetate membranes, polyester polyethersulfone membranes, polyethylene, and polyolefin membranes have been assessed, and none are suitable for this application and performance standard.

Recommendation: Because this internal component of a container performs vital roles for the product to function in a safe manner across multiple product categories (cleaning products and cosmetic products) subject to the 2026 sales prohibition, the Department recommends approval of this CUU proposal.

## **Cosmetic**

Proposal: HQC-ZQC8-3D9RZ

Product Description: Container O-ring, used for hand lotion

This proposal requests continued use of PFAS compounds in internal component parts of a container cartridge. Specifically, the O-ring made with vinylidene fluoride-hexafluoropropene polymer. The submitter states that the PFAS used is inert and has superior properties to provide the seal functionality necessary to ensure chemical compatibility with these complex product formulations. The product is marketed to provide accessible skin protection and hydration in high-risk environments like industrial, healthcare and food service settings.

Alternatives: The submitter states that alternatives such as silicones, EPDM (ethylene propylene diene monomer) and other elastomers have been identified but none match the compatibility necessary for this specific product formulation. Identified alternatives show unacceptable levels of degradation, cracking, brittleness, hardness, or swelling of the material due to chemical incompatibility, which leads to seal failure. The submitter states that an alternative material may be found that is compatible with the product chemistries if given additional time for development.

Recommendation: The proposal under consideration is for a product outside the exemption at 38 MRS §1614(4)(E) for “any product that is a medical device, drug or biologic or that is otherwise used in a medical setting or in medical applications that are regulated by or under the jurisdiction of the United States Food and Drug Administration,” and lacks evidence that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society. The Department does not recommend approval of this CUU proposal for the continued use of PFAS in the O-ring of this product.

## **Upholstered Furniture**

Proposal: HQC-Y1XK-HXXFJ

Product Description: Massage Chair, internal mechanical component

This proposal requests a CUU determination for PFAS compounds in internal component parts of a massage chair, specifically in the ball bearings of internal mechanical components of the

massage chair. The submitter states that PFAS used helps prevent mechanical noise, as well as providing longevity and safe performance for this furniture product. The proposal describes the importance of PFAS use in ball bearings of this product includes reduced friction and ensuring safe operability of internal mechanical components.

Alternatives: Submitter states that suppliers have not provided the identity of non-PFAS alternatives that have been tested and do not meet performance standards.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

#### Statutory Authority

The proposed rule is authorized by 38 M.R.S. § 1314 (10):

**10. Rules.** The department shall adopt rules to implement this section. Except as provided in subsection 5, paragraph C [currently unavoidable use determinations], rules adopted to implement this section are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

#### Requested Action

The Department staff recommends that the Board initiate rulemaking by posting for public comment and a public hearing the proposed amendments to rule Chapter 90 and to coordinate with the Board Executive Analyst regarding the date of the hearing and close of comment period.

#### Estimated time of agenda item

45 minutes

Chapter 90: Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances

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## Chapter 90: Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances

SUMMARY: This Chapter details the sales prohibitions for new and unused products containing intentionally added Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) as well as the notification requirements for products containing intentionally added PFAS determined to be a currently unavoidable use pursuant to 38 M.R.S. § 1614.

1. **Applicability.** Unless exempted in section 4, this Chapter applies to all new and unused products sold, offered for sale, or distributed for sale in the State of Maine which contain intentionally added perfluoroalkyl and polyfluoroalkyl substances.
2. **Definitions.**

**Adult Mattress.** “Adult mattress” is defined at 38 M.R.S. § 1614(1)(A-1).

**Aerosol propellant.** “Aerosol propellant” is defined at 38 M.R.S. § 1614(1)(A-2).

**Air care product.** “Air care product” is defined at 38 M.R.S. § 1614(1)(A-3).

**Aircraft.** “Aircraft” is defined at 38 M.R.S. § 1614(1)(A-4).

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NOTE: While the FAA considers unmanned aerial vehicles, commonly referred to as drones, to be aircraft, for the purposes of this rule, due to their unmanned nature, they do not meet the definition of aircraft.

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**Alternative.** “Alternative” is defined at 38 M.R.S. § 1614(1)(A-5).

**Architectural fabric structure.** “Architectural fabric structure” is defined at 38 M.R.S. § 1614(1)(A-6).

**Artificial Turf.** “Artificial turf” is defined at 38 M.R.S. § 1614(1)(A-7).

**Automotive maintenance product.** “Automotive maintenance product” is defined at 38 M.R.S. § 1614(1)(A-8).

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NOTE: Automotive maintenance products may be used on or marketed for use on any style of motor vehicle. Automotive maintenance products do not include items which are used in the mechanical maintenance of an automobile, such as oil, coolant, filters, and other consumable and replacement and repair parts.

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**Brand name.** “Brand name” means a name, symbol, word, or mark that identifies a product, and attributes the product to the owner of the brand.

**Carpet or rug.** “Carpet or rug” is defined at 38 M.R.S. § 1614(1)(A).

**Chemically-formulated.** “Chemically-formulated” means a synthetic substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except that such a term does not apply to substances created by naturally occurring biological processes.

**Cleaning Product.** “Cleaning product” is defined at 38 M.R.S. § 1614(1)(A-9).

**Commercially available analytical method.** “Commercially available analytical method” means any test methodology used by a laboratory that performs analyses or tests for third parties to determine the concentration of PFAS in a product or a methodology which is publicly available or available for purchase. Commercially available analytical methods do not need to be performed at a third-party laboratory; however, the method must remain unmodified. Laboratories performing commercially available analytical methods must be accredited in accordance with 22 M.R.S. § 567.

**Consumer products.** “Consumer products” means goods which are marketed for and intended to be used primarily for personal, family or household purposes.

**Container.** “Container” means any package as defined in 32 M.R.S. § 1732(4), which is meant to encase a liquid, powder, or gas by means of direct contact.

**Cookware product.** “Cookware product” as defined at 38 M.R.S. § 1614(1)(A-10) is limited to houseware intended to be in direct contact with food or beverage. Cookware does not encompass items intended for use in and marketed exclusively for use in commercial, industrial, or institutional settings.

**Cosmetic Product.** “Cosmetic Product” as defined at 38 M.R.S. § 1614(1)(A-11) to include inks, such as tattoos, implants, jewelry, and body modifications that are introduced into the human body unless otherwise exempted under section 4. Soap has the same meaning as 21 C.F.R. § 701.20, as amended up to April 1, 2024.

**Cosolvent.** “Cosolvent” means substances added to a primary solvent in small amounts to increase the solubility of a poorly soluble compound.

**Currently unavoidable use.** “Currently unavoidable use” is defined at 38 M.R.S. § 1614(1)(B).

**Dental floss.** “Dental floss” means a product designed to clean between teeth in places that are not accessible with a toothbrush or an interdental brush. The product can be packaged with pre-cut or continuous length of strong thread or fine tape and is specifically designed to be drawn between the teeth to remove food particles and prevent dental plaque, such as dental floss and dental tape. Dental floss includes products commonly referred to as flossers where a section of dental floss is mounted to a handle or device meant to

facilitate the act of flossing. Dental floss does not include products such as water flossers or other similar devices.

**Department.** “Department” defined at 38 M.R.S. § 341-A(2).

**Distribute for sale.** “Distribute for sale” means to ship or otherwise transport a product with the intent or understanding that it will be sold or offered for sale in Maine by a receiving party subsequent to its delivery.

**Electronics.** “Electronics” means technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities.

**Environmental control technology.** “Environmental control technology” means any system, item of equipment or component having as its primary function the reduction or prevention of an environmental impact.

**Essential for health, safety, or the functioning of society.** “Essential for health, safety or the functioning of society” is defined at 38 M.R.S. § 1614(1)(B-1).

**Fabric.** “Fabric” means a textile made by weaving, knitting, or felting natural or synthetic fibers. For the purposes of this rule, fabric includes leather and synthetic leather.

**Fabric treatment.** “Fabric treatment” is defined at 38 M.R.S. § 1614(1)(C).

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NOTE: Fabric treatments do not include fabric dyes.

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**Finished product.** “Finished product” means a product that has been manufactured, packaged, and is in the form, packaging, and condition in which it will be sold, offered for sale, or distributed for sale.

**Foam.** “Foam” is defined at 38 M.R.S. § 1614(1)(C-1).

**Fully fluorinated carbon atom.** “Fully fluorinated carbon atom” means a carbon atom on which all the hydrogen substituents have been replaced by fluorine.

**Functionally equivalent.** “Functionally Equivalent” means a product or product component that functions in the same basic manner as the product it is being compared against to perform the same purpose to the same standard as the original PFAS containing product or product component it is being compared against.

**Fluorinated container.** “Fluorinated container” means any container which has been treated with fluorine atoms to create a permanent barrier or coating.

**Intentionally added PFAS.** “Intentionally added PFAS” is defined at 38 M.R.S. § 1614(1)(D).

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NOTE: Intentionally added PFAS includes degradation by-products serving a functional purpose or technical effect within the product or its components. Products containing intentionally added PFAS include products that consist solely of PFAS. Intentionally added PFAS does not include PFAS that is present in the final product as a contaminant or PFAS used in the manufacturing process or comes into contact with the product during the manufacturing process but is not present in the final product.

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**Intrinsic to the design or construction of a building.** “Intrinsic to the design or construction of a building” means those elements of a building or structure which are necessary to perform its intended purpose. Intrinsic to the design or construction of a building may include structural elements and other elements meant to block light, wind, or precipitation. Intrinsic to the design or construction of a building does not include elements which are solely decorative or otherwise merely enhance the attractiveness of a structure or its function or those elements that are quickly or easily removed from the structure.

**Juvenile product.** “Juvenile product” is defined at 38 M.R.S. § 1614(1)(D-1).

**Known to or reasonably ascertainable by.** “Known or reasonably ascertainable by” is defined at 38 M.R.S. § 1614(1)(D-2).

**Laboratory equipment.** “Laboratory equipment” means any analytical instrument or support equipment that is required to generate the results of an analysis. Laboratory equipment includes, but is not limited to, any tool, gear, or appliance that is intended to be used in the creation, separation, sampling, or monitoring of a substance, such as electromagnetic phenomenon, reaction vessels, gas generators, or preparatory or purifying equipment.

**Manufacturer.** “Manufacturer” is defined at 38 M.R.S. § 1614(1)(E).

**Mattress.** “Mattress” means a resilient material or combination of materials enclosed by ticking, intended for sleeping upon, and may include adult, youth, crib, bunk bed, futon, flip chairs, sleeper, water, or air mattresses.

**Medical device.** “Medical device” is defined at 38 M.R.S. § 1614(1)(E-1).

**Menstruation products.** “Menstruation products” means products used to catch menstrual flow, such as disposable and reusable pads, tampons, period underwear, and menstrual cups.

**Off-highway vehicle.** “Off-highway vehicle” is defined at 38 M.R.S. § 1614(1)(E-2).

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NOTE: A vehicle manufactured by the brand Stellantis and badged with the Jeep brand does not qualify solely based on its brand name.

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**Offer for sale.** “Offer for sale” means to make a product available for purchase, including through online sales platforms that deliver into the State of Maine.

**Outdoor apparel for severe wet conditions.** “Outdoor apparel for severe wet conditions” is defined at 38 M.R.S. § 1614(1)(E-3).

**Perfluoroalkyl and polyfluoroalkyl substances (PFAS).** “Perfluoroalkyl and polyfluoroalkyl substances” or “PFAS” is defined at 38 M.R.S. § 1614(1)(F).

**Person.** “Person” means any individual; partnership; corporation; firm; or public or private organization of any character.

**Product.** “Product” is defined at 38 M.R.S. § 1614(1)(G).

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NOTE: Product includes packages, packaging components, and food packaging as defined in 32 M.R.S. § 1732, when sold individually or in bulk and not used in marketing, handling, or protecting a product.

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**Product component.** “Product component” is defined at 38 M.R.S. § 1614(1)(H).

**Proprietary information.** “Proprietary information” is defined at 38 M.R.S. § 1614(1)(H-1).

**Publicly available.** “Publicly available” means information that is lawfully made available to the general public from federal, state, or local government records, widely distributed media, or disclosures made to the general public that are required by federal, state, or local law.

**Reasonably available.** “Reasonably available” means a PFAS alternative which is readily available in sufficient quantity and at a comparable cost to the PFAS, to include changes to the manufacturing process, it is intended to replace and performs as well as or better than PFAS in a specific application of PFAS in a product or product component.

**Refrigerant.** “Refrigerant” is defined at 38 M.R.S. § 1614(1)(J).

**Resilient floor covering.** “Resilient floor covering” means a non-textile floor that provides underfoot comfort and characteristically bounces back from repeated traffic or compression.

**Semiconductor.** “Semiconductor” means material having conductivity characteristics intermediate between conductors and insulators, as well as a discrete functional object having two or more layers of metallic, insulating, or semiconductor material, deposited or otherwise placed on, or etched away or otherwise removed from, a piece of semiconductor material in accordance with a predetermined micron or sub-micron pattern and intended to perform electronic and other related functions. Semiconductors do not include commonly associated materials such as printed circuit boards (PCB), PCB

mounting solder, PCB mounting flux, external wires, PCB screen printing ink, connectors and sockets, or PCB conformal coatings.

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NOTE: A product must meet the definition of a semiconductor product and will not be considered to meet the definition solely because the product serves the same or similar purpose as semiconductors.

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**Significant change.** “Significant change” means a change in the composition of a product which results in the intentional addition of a specific PFAS; a change in the amount of PFAS of more than a 10% increase, above the method variability allowed by the commercially available analytical method used, of the concentration that has been reported when compared to the existing notification; or a change in responsible official or contact information. Significant change includes when information used to obtain a waiver is no longer accurate.

**Single Use.** “Single use” is defined at 38 M.R.S. § 1614(1)(K).

**Soap.** “Soap” means a product composed mainly of the alkali salts of fatty acids, that is, the material you get when you combine fats or oils with an alkali, such as lye.

**Substantially equivalent information.** “Substantially equivalent information” means information that the Department can reasonably identify as conveying the same information required in section 3(A). Substantially equivalent information must all be in a single document or location. Substantially equivalent information may include an existing notification by a person who manufactures a product or product component when the same product or product component is offered for sale under multiple brands.

**Ski wax.** “Ski wax” is defined at 38 M.R.S. § 1614(1)(L).

**Textile.** “Textile” is defined at 38 M.R.S. § 1614(1)(M).

**Textile article.** “Textile article” is defined at 38 M.R.S. § 1614(1)(N).

**Upholstered furniture.** “Upholstered furniture” is defined at 38 M.R.S. § 1614(1)(O).

**Used.** “Used” means the condition of a product having been installed, operated, or utilized for its intended purpose by at least one owner or operator. Used does not apply to a product that has been returned to a retailer or that is otherwise offered for resale without the product having been installed, operated, or utilized.

**Vehicle.** “Vehicle” is defined at 38 M.R.S. § 1614(1)(P).

### 3. Notification.

- A. Upon the applicable effective date listed in section 5, a product containing intentionally added PFAS is prohibited from being sold, offered for sale, or distributed for sale in the State of Maine. This prohibition is effective immediately for all covered products, including those already in the stream of commerce. Only those products for which there is a currently unavoidable use determination and the Department has received a completed notification meeting the requirements under this section, including the accompanying fee, are permitted for sale after the effective date of the sales prohibition.

Upon the applicable effective date found in section 5, for any product which is covered by a currently unavoidable use determination listed in section 9(B) any manufacturer, with greater than 100 employees, of a product subject to this Chapter which is for sale in the State and that contains intentionally added PFAS shall submit to the Department a notification consisting of the following to the extent known to or reasonably ascertainable by the manufacture:

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NOTE: To prevent sales disruptions, the Department encourages manufacturers to submit notifications in advance of any applicable effective date as detailed in section 5 of this rule.

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- (1) A notification under this section must include:
- (a) A brief description of the product, including but not limited to;
    - (i) Global Product Classification (GPC) brick category and code, if available;
      - (I) If GPC is not applicable to the product the United States International Trade Commission's Harmonized Tariff System (HTS).
    - (ii) The North American Industry Classification System code for the sector or sectors in which the products containing intentionally added PFAS will be utilized.
    - (iii) The general type of the product; and
    - (iv) Its intended use.
  - (b) An estimate of the total number of units sold annually in the State of Maine or nationally;
  - (c) The purpose for which intentionally added PFAS are used in the product, including in any product component;
  - (d) The identity of each intentionally added PFAS by:
    - (i) Its name and its chemical abstracts service (CAS) registry number; or

- (ii) In the absence of this number the chemical name following the nomenclature of the international union of pure and applied chemistry (IUPAC).
- (e) The amount of each of the intentionally added PFAS in the product or any product component:
  - (i) Reported as an exact quantity as a concentration must be reported as a percentage by weight (% weight), determined using commercially available analytical methods;
  - (ii) The total organic fluorine if the amount of each intentionally added PFAS is not known or reasonably ascertainable, determined using commercially available analytical methods;
  - (iii) Based on information provided by a supplier or as falling within a range approved by the Department.

If reporting intentionally added PFAS as falling within a Department-approved range, implemented in the Department's online notification system, the manufacturer may rely on calculations specific to the inputs and outputs of their manufacturing process or that of a product component's manufacturer to determine the amount of intentionally added PFAS present; or

- (iv) If neither quantities of specific intentionally added PFAS compounds or total organic fluorine are known or reasonably ascertainable, a manufacturer must provide the total weight of the product.

For product components for which the Department has previously received notifications, which are used in products containing the reported components, the manufacturer of the product shall either report intentionally added PFAS in the product including its components or refer to the supplier's submitted notifications for product components and any intentionally added PFAS in the remainder of the product.

- (f) The name and address of the reporting manufacturer, and the name, address, email address, and phone number of a responsible official for the manufacturer. The responsible official provided must have the authority to execute or direct others to execute the steps in section 8 below.

For notifications submitted to the Department under the statutory requirement and prior to the availability of the digital reporting system, the notification must be submitted into the digital database within 90 days of its availability.

- (g) Identification, by citation to a specific section of this Chapter, of the applicable determination by the Department that the use of intentionally added PFAS in the product subject to the notification is a currently unavoidable use.

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NOTE: To be considered a valid notification, where applicable, the information provided by the manufacturer must be consistent with the information listed in the applicable currently unavoidable use determination.

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- (2) Waiver of notification. The Department may waive all or part of the notification requirement under section 3(A)(1) if the Department determines that substantially equivalent information is publicly available, except that the Department will not issue a waiver for the information required in subsections 1(f) and (g) above.
- (a) The Department will evaluate issuing a waiver to the notification requirement if the manufacturer submits a request containing the following:
- (i) A description of the product(s) for which a waiver is requested;
  - (ii) A list of which requirements of section 3(A)(1) the manufacturer seeks a waiver for;
  - (iii) A description of any publicly available records which contain information substantially equivalent to the information required in section 3(A)1, above;
  - (iv) A statement that information in subsection 2(a)(iii) above is updated in a similar manner as required by subsection D below and;
  - (v) A link to or copy of all publicly available substantially equivalent information described by the manufacturer.
- (b) The manufacturer shall still complete the notification for any requirements that were not waived and include directions to where the publicly available substantially equivalent information can be found, and pay the fee established in section 6.
- B.** The information required in subsection A above must be submitted in a form approved by the Department. Electronic submission of complete information to the Department's online notification system satisfies this requirement.
- C.** A manufacturer may submit a single notification to the Department for multiple products if all of the products are covered by the same currently unavoidable use determination found in section 9(B).
- D.** A manufacturer shall update the information in the notification whenever there is a significant change in the reported information or when requested to do so by the Department. The manufacturer must notify the Department if the information relied on for a waiver is no longer substantially similar due to a significant change.

- (1) In the event of a significant change or request by the Department, a manufacturer shall update their notification:
    - (a) Within 60 days of a request by the Department;
    - (b) Within 30 days of any change in responsible official or contact information; or
    - (c) Prior to the start of sales of a product with a new formulation or when there is a significant change in the amount or type of PFAS present in the product.
  - (2) A manufacturer may voluntarily update the notification whenever a PFAS is reduced or eliminated, or to inactive status whenever a product is modified such that it no longer contains any intentionally added PFAS.
- E.** A notification is not effective until the Department has received payment of the fee required by section 6.
- F.** A manufacturer shall provide, upon request by the Department, evidence sufficient to demonstrate the accuracy of the information reported in subsection A.
- G.** Notifications to the Department expire on the same date the applicable currently unavoidable use determination, in section 9(B), lapses.

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NOTE: See section 9(A) for procedures for requesting a new currently unavoidable use determination, including determinations for products covered by a determination that will expire.

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#### **4. Exemptions.**

- A.** The following are exempt from the requirements of this Chapter:
- (1) A product for which federal law governs the presence of PFAS in the product in a manner that preempts state authority. For this purpose, the provisions of this Chapter are severable, and if any phrase, section, or subsection is preempted by federal law, the validity of the remainder of this Chapter shall not be affected;
  - (2) A package as defined at 32 M.R.S. § 1732(4), for a product, except when the package is the product of the manufacturer. The exemption under this subsection does not apply to the package of a product prohibited from sale, offer for sale, or distribution for sale pursuant to sections 5(B), (C), (E), or (F) if that package is a fluorinated container or container that otherwise contains intentionally added PFAS;
  - (3) A used product or product component;
  - (4) A firefighting or fire-suppressing foam or related product regulated under 38 M.R.S. § 424-C;

- (5) A prosthetic or orthotic device or any product that is a medical device, drug or biologic or that is otherwise used in a medical setting or in medical applications that are regulated by or under the jurisdiction of the United States Food and Drug Administration (FDA);
- (6) A veterinary product intended for use in or on animals, including diagnostic equipment or test kits and the components and any product that is a veterinary medical device, drug, biologic or parasiticide or that is otherwise used in a veterinary medical setting or in veterinary medical applications that are regulated by or under the jurisdiction of:
  - (a) The FDA;
  - (b) The United States Department of Agriculture (USDA) pursuant to the federal Virus-Serum-Toxin Act; or
  - (c) The Environmental Protection Agency pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act, except that any such product approved by the EPA pursuant to that law for aerial or land application are not exempt from this Chapter.
- (7) A product developed or manufactured for the purposes of public health, environmental or water quality testing;
- (8) A product required to meet standards or requirements of the United States Department of Transportation, FAA, the National Aeronautics and Space Administration (NASA), the United States Department of Defense (DOD) or the United States Department of Homeland Security (DHS), except that the exemption under this subsection does not apply to any textile article or refrigerant that is included in or as a component part of such products;
- (9) A motor vehicle or motor vehicle equipment regulated under federal motor vehicle safety standards, as defined in 49 U.S.C. § 30102(a)(10), and any other motor vehicle, including an off-highway vehicle or specialty motor vehicle, such as an all-terrain vehicle, side-by-side vehicle, farm equipment or personal assistive mobility device, except that the exemption under this subsection does not apply to any textile article or refrigerant that is included in or as a component of such products;
- (10) A watercraft as defined in 32 M.R.S. § 13001(28), or a seaplane, except that the exemption under this subsection does not apply to any textile article or refrigerant that is included in or as a component part of such products;
- (11) A semiconductor, including semiconductors incorporated into electronic equipment, and equipment and materials used in the manufacture of semiconductors;

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NOTE: While semiconductors incorporated into electronic equipment are exempted from this Chapter, electronic equipment in their entirety is not exempt unless otherwise specified. Manufacturers of electronic equipment are still subject to sales prohibitions, currently unavoidable use determinations, and notification requirements on the balance of their product which is not comprised of semiconductors.

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(12) Non-consumer electronics and non-consumer laboratory equipment not ordinarily used for personal, family or household purposes; and

(13) Equipment directly used in the manufacture or development of products described in subsections 5 through 12, above.

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NOTE: The statutory basis for this rulemaking contains certain exemptions of products that are regulated by, or are under the jurisdiction of, certain federal agencies pursuant to federal law. The Department understands the legislative intent to be that any changes to federal law that affect these exemptions will apply to the exemptions as soon as the federal changes become effective. No amendment of this rule will be necessary for such changes to apply to the Department's operation of this program.

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## **5. Prohibition on Sale of Products Containing Intentionally Added PFAS.**

- A.** Except as provided pursuant to subsection H and section 9(B), effective January 1, 2023, a person may not sell, offer for sale, or distribute for sale in the State of Maine a carpet or rug that contains intentionally added PFAS.

This prohibition does not apply to the sale or resale of a used carpet or rug.

- B.** Except as provided pursuant to subsection H and section 9(B), effective January 1, 2023, a person may not sell, offer for sale, or distribute for sale in the State of Maine a fabric treatment that contains intentionally added PFAS.

The prohibition under this subsection applies to fabric treatment that does not contain intentionally added PFAS but that is sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS.

This prohibition does not apply to the sale or resale of a used fabric treatment or used product to which fabric treatment has been applied.

- C.** Except as provided in subsection H and section 9(B), effective January 1, 2026, a person may not sell, offer for sale or distribute for sale in the State of Maine:

(1) A cleaning product containing intentionally added PFAS;

(2) A cookware product containing intentionally added PFAS;

- (3) A cosmetic product containing intentionally added PFAS;
- (4) Dental floss containing intentionally added PFAS;
- (5) A juvenile product containing intentionally added PFAS;
- (6) A menstruation product containing intentionally added PFAS;
- (7) A textile article containing intentionally added PFAS. The prohibition under this subsection does not include:
  - (a) Outdoor apparel for severe wet conditions; or
  - (b) A textile article that is included in or a component part of a watercraft, aircraft or motor vehicle, including an off-highway vehicle;
- (8) Ski wax containing intentionally added PFAS; or
- (9) Upholstered furniture containing intentionally added PFAS.

The prohibitions under this subsection apply to any of the products listed in subsections 1 through 9 that do not contain intentionally added PFAS but that are sold, offered for sale or distributed for sale in a fluorinated container or container that otherwise contains intentionally added PFAS.

The prohibitions under this subsection do not apply to products that are sold, offered for sale or distributed in used condition.

- D.** Except as provided in subsection H and section 9(B), effective January 1, 2029, a person may not sell, offer for sale or distribute for sale in the State of Maine;

- (1) Artificial turf containing intentionally added PFAS; or
- (2) Outdoor apparel for severe wet conditions containing intentionally added PFAS, unless the apparel is accompanied by a legible, easily discernable disclosure that includes the following statement: “Made with PFAS chemicals.” The disclosure requirement under this subsection applies to all sales, offers for sale or distributions for sale in the State of Maine for outdoor apparel for severe wet conditions containing intentionally added PFAS.

The prohibitions under this subsection do not apply to any listed products that are sold, offered for sale or distributed for sale in used condition.

- E.** Except as provided in subsection H and section 9(B), effective January 1, 2032, a person may not sell, offer for sale, or distribute for sale in the State of Maine any product that is

not already prohibited for sale under subsections A, B, C, D, or G that contains intentionally added PFAS. This prohibition does not apply to the sale or resale of a used product.

The prohibition under this subsection applies to any such products that do not contain intentionally added PFAS but that are sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS.

The prohibitions under this subsection do not apply to:

- (1) Any such product sold, offered for sale or distributed for sale in used condition; and
- (2) Products subject to subsection F, below.

**F.** Except as provided in subsection H and section 9(B), effective January 1, 2040, a person may not sell, offer for sale or distribute for sale in the State of Maine:

- (1) Cooling, heating, ventilation, air conditioning or refrigeration equipment that contains intentionally added PFAS; or
- (2) Refrigerants, foams, or aerosol propellants that contain intentionally added PFAS.

The prohibitions under this subsection apply to any of the listed products that do not contain PFAS but are sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS.

The prohibition of this subsection does not apply to any such products sold, offered for sale or distributed for sale in used condition or to parts and other servicing needs for cooling, heating, ventilation, air conditioning or refrigeration equipment, including refrigerants used in servicing such equipment as long as the refrigerant is listed as acceptable, acceptable subject to use conditions or acceptable subject to narrowed use limits by the EPA pursuant to the Significant New Alternatives Policy Program at 40 C.F.R. Part 82 Subpart G, as long as the refrigerant, foam, or aerosol propellant is sold, offered for sale or distributed for sale for the use for which it is listed pursuant to that program.

**G.** The Department has identified the following products by category or use that contain intentionally added PFAS. Beginning on the date listed below a person may not sell, offer for sale, or distribute for sale the listed items in the State of Maine:

- (1) [Reserved]. Example: *Beginning January 1, XXXX a person may not sell, offer for sale, or distribute for sale in the State of Maine PRODUCT CATEGORY that contains intentionally added PFAS.*

**H.** The prohibitions in section 5 do not apply to a retailer in the State of Maine unless the retailer sells offers for sale or distributes for sale in the State of Maine a product

containing intentionally added PFAS for which the retailer has received a notification pursuant section 8(2) that the sale of the product is prohibited.

**6. Fees.**

- A. Fee amount.** To cover the administrative costs incurred by the Department to administer the program, a manufacturer of products required by section 3 to provide notice shall, as part of the submission of notification, pay a fee of \$1,500 for each notification submitted.

For the purposes of calculating fees, each submission of all the information required in section 3(A)(1), which has not been waived, for either an individual product or a group of products reported under a single currently unavoidable use determination will be considered a separate notification.

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NOTE: Notifications are required only for products which are subject to a currently unavoidable use determination and are sold, offered for sale, or distributed for sale in the State of Maine. Product components that are incorporated into products which are sold, offered for sale, or distributed for sale in Maine are not subject to the notification requirement, even when information regarding the product components is provided as part of that product's notification submission.

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A fee is required for notifications of products, including those submitted under a subsequent currently unavoidable use determination. No fee is required for information updates to an existing notification or changes to inactive status.

- B.** Fees will be considered paid either when funds are transferred to the Treasurer of the State of Maine or when a confirmation of electronic payment is transmitted. If paying electronically via the Department's reporting database, a receipt confirming digital payment will be issued.

**7. Failure to Provide Notice.**

- A.** Beginning January 1, 2032, unless granted a waiver in accordance with section 3(A)(2) above, a person may not sell, offer for sale, or distribute for sale in the State of Maine a product containing intentionally added PFAS regardless of whether the Department has determined a current unavoidable use exists if the manufacturer has failed to provide the information required under section 3.

The prohibition in this section does not apply to a retailer in the State of Maine unless the retailer sells, offers for sale, or distributes for sale in the State of Maine a product for which the retailer has received a notification pursuant to section 8(A)(2) that the sale of the product is prohibited.

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NOTE: Violations of this Chapter are subject to the Department’s enforcement authority under 38 M.R.S. §§ 347-A - 349. The Department’s initial focus will be on encouraging voluntary compliance. If a person resists efforts to achieve voluntary compliance the Department may take progressive steps to achieve compliance.

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**8. Certificate of Compliance.**

- A. If the Department has reason to believe that a product contains intentionally added PFAS and is being sold, offered for sale, or distributed for sale in violation of sections 5 and 7, the Department may direct the manufacturer of the product to, within 30 days:
- (1) Provide the Department with certification, on forms provided by the Department, attesting that the product does not contain intentionally added PFAS; or
  - (2) Notify any persons who sell, offer for sale, or distribute for sale that product in Maine that the sale of that product is prohibited in Maine, and provide the Department with a list of the names and addresses of those notified.

**9. Currently Unavoidable Use.**

**A. Proposal for Currently Unavoidable Use Determinations.**

Proposals for currently unavoidable use (“CUU”) determinations may be submitted by manufacturers individually or collectively. A separate proposal must be submitted for each individual combination of product category and the associated industrial sector. The Department requests that manufacturers submit their proposals to [PFASProducts@maine.gov](mailto:PFASProducts@maine.gov) with a subject line of “CUU Proposal for [GPC/HTC] in [NAICS] sector by [Proposal Submitter’s Name or Organization]”.

For initial currently unavoidable use proposals, the requester shall submit the information in this section no later than 18 months prior to the applicable sales prohibition. The Department will not consider any proposals for an initial currently unavoidable use determination prior to 60 months in advance of the applicable sales prohibition; any proposals received prior to this date will need to be updated and resubmitted between 60 and 18 months before the effective date of the applicable sales prohibition (with the exception of CUU proposals for sales prohibitions taking effect 2026, which must be submitted no later than June 1, 2025). Proposals received after the 18 months prior to the sales prohibition effective date may be evaluated for inclusion in a subsequent rulemaking. Proposals received after the sales prohibition is in effect will be evaluated for inclusion in a subsequent Department CUU rulemaking.

A proposal must, at a minimum, contain:

- (1) A brief description of the type of product to which PFAS is intentionally added including:

- (a) A brief narrative of the product; its physical structure and appearance; how it functions; and if applicable its place in larger items, systems, or processes;
  - (b) If applicable, the Global Product Classification (GPC) brick category and code, or if GPC is not applicable then the Harmonized Tariff System (HTS) code; and
  - (c) The North American Industry Classification System (NAICS) code for the sector or sectors in which the products containing intentionally added PFAS will be utilized.
- (2) An explanation of why the availability of PFAS in the specific product identified in subsection 1 is essential for health, safety or the functioning of society. This may include or take the form of a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product;
- (3) A description of how the specific use of PFAS in the product is essential to the function of the product. Including:
- (a) If this use of PFAS is required by federal or state law or regulation, provide citations to that requirement. For the purposes of this subsection, “required” means the applicable statute or regulation specifically states that PFAS or a specific PFAS is required to be present in the product, not that the proposer’s understanding or experience of PFAS is necessary to meet a performance standard; such performance standards may be addressed in subsection b, below; and

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NOTE: Products required to meet certain federal standards or regulated under certain federal programs are exempt from this Chapter. See section 4 for more information.

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- (b) The required specific characteristic or combination of characteristics that necessitate the use of PFAS chemicals.
- (4) A description of whether there are alternatives for this specific use of PFAS which are reasonably available including:
- (a) Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution;
  - (b) An assessment of how the materials in subsection a, above, meet or fail to meet the criteria identified in 3(b);
  - (c) An assessment if materials identified in subsection a, above, are anticipated to be available in sufficient quantities to meet production needs without regard to cost;

- (d) An assessment of the anticipated cost difference between obtaining PFAS for use in a product and obtaining the material identified in (a), for the same purpose;
  - (e) A comparison of the known risks to human health and the environment between PFAS and the materials identified in (a); and
  - (f) An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.
- (5) A list of federal regulations, other State of Maine rules, and regulations of other states which the product described in subsection 1 is subject to by reason of containing intentionally added PFAS, including;
- (a) Details of any sales prohibition the product is subject to because of containing intentionally added PFAS including;
    - (i) Whether that sales prohibition is absolute or if there is a process similar to the State of Maine's currently unavoidable use determination.
    - (ii) If there is a similar process available, whether the requester has filed a proposal under the relevant state or federal program, and its status.
- (6) If, in another jurisdiction the product is subject to an absolute prohibition or no currently unavoidable use determination or similar has been made, a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that jurisdiction;
- (7) If a similar program's sales prohibition is identified as applicable in subsection 5 and similar products are available for sale, offered for sale, or distributed for sale;
- (a) A justification explaining how products available in compliance with other similar sales prohibitions are not reasonably available alternatives for the product subject to the proposed CUU in the State of Maine. This may include demonstrating that additional sales in the State of Maine would result in such an increased demand for the PFAS alternative that it would no longer be available in sufficient quantities, such a demonstration must include an assessment that an increase in production of the PFAS alternative is not possible; or
  - (b) Documentation demonstrating that products containing PFAS alternatives in other jurisdictions would not perform as intended in the State of Maine due to differing physical or climate conditions in the State of Maine;
- (8) Contact information for the submitter of the proposal. The contact person or persons should be familiar with the contents of the proposal and, if necessary, be able to answer Department questions or provide additional requested information; and

- (9) Any information known or reasonably ascertainable by the manufacturer regarding the impacts on human health or the environment of PFAS in the product. At a minimum this should include the following items, if available;
- (a) Any information documenting impacts on human health as a result of the specific use of PFAS in the product;
  - (b) A description of the likely pathways of human exposure for the specific use of PFAS in the product;
  - (c) Any information documenting environmental impacts as a result of the specific use of PFAS in the product;
  - (d) A description of any likely pathways for environmental release of PFAS as a result of the specific use of PFAS in the product; and
  - (e) A description of the product's fate at the end of its lifecycle. This should include;
    - (i) Documentation of any product stewardship programs or other government-imposed processes at the end of a product's lifecycle,
    - (ii) How the product is intended to be disposed of, such as landfilling or via a sewage or septage system, and
    - (iii) The recycling rate of the product.

Information submitted to the Department must contain sufficient detail or supporting documentation to satisfy the requirements of the currently unavoidable use as essential for health, safety or the functioning of society for which alternatives are not reasonably available.

If any of the information above is omitted from the proposal, the requestor must explain why this information is omitted.

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NOTE: While 38 M.R.S. § 1614(12) and section 10 provide a mechanism for the protection of proprietary information, currently unavoidable use determinations are subject to the Department's rulemaking process including approval by the Board of Environmental Protection in a public meeting and response to public comments. Should a proposal for a currently unavoidable use determination contain claims of confidentiality, the Department may determine that there is insufficient publicly available information to justify a rulemaking. The Department strongly recommends that all proposals for currently unavoidable use determinations do not contain claims of confidentiality.

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Upon the expiration date listed in s 9(B), a currently unavoidable use determination is no longer applicable, and all sales, offers for sale, or distributions for sale are immediately prohibited.

If a person believes the currently unavoidable use remains, they may submit a proposal to the Department for a new currently unavoidable use determination. That proposal, in addition to the information required above, must include a description of any changes since the time of the first currently unavoidable use determination and a summary of efforts made during that time to develop or discover alternatives or to make existing alternatives reasonably available. The Department will consider all subsequent proposals no sooner than 24 months prior to and no later than 12 months prior to the expiration date of the determination in effect. Proposals received after the expiration of the applicable CUU designation will be evaluated and considered for inclusion in a subsequent Department CUU rulemaking.

## B. Department Designations of Currently Unavoidable Use.

The Department has determined that the following uses of PFAS are currently unavoidable uses. Each determination will remain in effect until the date listed below.

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*NOTE: Example: The use of PFAS in products within the HTC/GPC classification #### in the industrial sector with the NAICS code #### is a currently unavoidable use until month day, year (either 5 years from applicable prohibition OR held blank to be filled in by SOS as 5 years from effective date).*

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- 1) The use of PFAS in a cleaning product container internal cartridge valve within the HTS classification 3926.90.4510, which are used in the industrial sector with the NAICS codes 561210 and 561720 is a currently unavoidable use until January 1, 2031.
- 2) The use of PFAS in a cleaning product container, or a cosmetic product container, a vented cap liner within the HTS classification 3921.19.0000, 7607.20.5000, and 3923.50.0000, which are used in the industrial sector with the NAICS code 322299 is a currently unavoidable use until January 1, 2031.

## 10. Proprietary Information.

Information provided to the Department pursuant to this Chapter is a public record as provided by 38 M.R.S. § 1310-B(1). A party may designate proprietary information that it submits to the Department pursuant to this Chapter confidential in the manner prescribed by 38 M.R.S. § 1310-B(2). Such designations will be handled by the Department in accordance with 38 M.R.S. § 1310-B(2).

**DRAFT**

This subsection does not authorize a manufacturer to refuse to disclose to the Department information required under this Chapter.

AUTHORITY: 38 M.R.S. § 1614

**§1614. Products containing PFAS****(REALLOCATED FROM TITLE 38, SECTION 1612)**

**1. Definitions.** As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Carpet or rug" means a consumer product made from natural or synthetic fabric intended to be used as a floor covering inside commercial or residential buildings. "Carpet or rug" includes, but is not limited to, a carpeted doormat, but does not include:

- (1) A carpet or rug intended solely for outdoor use;
- (2) A carpet or rug intended solely for use inside an aircraft, train, watercraft, automobile, light duty truck, van, bus or any other vehicle and any aftermarket or replacement part marketed solely for use in a vehicle;
- (3) A resilient floor covering;
- (4) Artificial turf;
- (5) A wall hanging or covering;
- (6) A table mat; or
- (7) A camping sleeping mat. [PL 2023, c. 630, §1 (AMD).]

A-1. "Adult mattress" means a mattress that is not a crib mattress or a toddler mattress. [PL 2023, c. 630, §1 (NEW).]

A-2. "Aerosol propellant" has the same meaning as in section 1613, subsection 1, paragraph A. [PL 2023, c. 630, §1 (NEW).]

A-3. "Air care product" means a chemically formulated consumer product labeled to indicate that the purpose of the product is to enhance or condition an indoor environment by eliminating odors or freshening the air. [PL 2023, c. 630, §1 (NEW).]

A-4. "Aircraft" means a contrivance operated by direct physical contact from a human that is used or designed for navigation of or flight in the air that requires certification and registration as prescribed by federal law or regulation. "Aircraft" does not include:

- (1) A lighter-than-air balloon operated by direct physical contact from a human; or
- (2) An ultralight vehicle, as defined in 14 Code of Federal Regulations, Part 103, regardless of whether the ultralight vehicle is certified by the United States Department of Transportation, Federal Aviation Administration. [PL 2023, c. 630, §1 (NEW).]

A-5. "Alternative" means a substance or chemical that, if used in place of a PFAS in a product, would result in a functionally equivalent product and would reduce the potential for harm to human health or the environment or that has not been shown to pose the same or greater potential harm to human health or the environment as the PFAS. "Alternative" includes:

- (1) A reformulated version of a product in which the intentionally added PFAS in the product has been removed; and
- (2) Changes to a product's manufacturing process that result in the removal of the PFAS from the product. [PL 2023, c. 630, §1 (NEW).]

A-6. "Architectural fabric structure" means a permanent fabric structure that is intrinsic to the design or construction of a building. [PL 2023, c. 630, §1 (NEW).]

A-7. "Artificial turf" means an artificial product made from synthetic material that simulates the appearance of natural turf, grass, sod or lawn. [PL 2023, c. 630, §1 (NEW).]

A-8. "Automotive maintenance product" means a chemically formulated consumer product labeled to indicate that the purpose of the product is to maintain the appearance of a motor vehicle. "Automotive maintenance product" includes products for washing, waxing, polishing, cleaning or treating the exterior or interior surface of a motor vehicle, but does not include automotive paint or automotive paint repair products. [PL 2023, c. 630, §1 (NEW).]

A-9. "Cleaning product" means a finished product used primarily for domestic, commercial or institutional cleaning purposes, including, but not limited to, an air care product, an automotive maintenance product, a general cleaning product and a polish or floor maintenance product. [PL 2023, c. 630, §1 (NEW).]

A-10. "Cookware product" means a durable houseware product intended to be used to prepare, dispense or store food, foodstuffs or beverages, including, but not limited to, a pot, pan, skillet, grill, baking sheet, baking mold, tray, bowl and cooking utensil. [PL 2023, c. 630, §1 (NEW).]

A-11. "Cosmetic product" means a product intended to be rubbed, poured, sprinkled or sprayed on, introduced into or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness or altering the appearance. "Cosmetic product" includes any product intended for use as a component of another cosmetic product, but does not include soap or a product that requires a prescription for distribution or dispensing. [PL 2023, c. 630, §1 (NEW).]

B. "Currently unavoidable use" means a use of PFAS that the department has determined by rule under this section to be essential for health, safety or the functioning of society and for which alternatives are not reasonably available. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

B-1. "Essential for health, safety or the functioning of society" means a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in:

- (1) A significant increase in negative health outcomes;
- (2) An inability to mitigate significant risks to human health or the environment; or
- (3) A significant disruption of the daily functions on which society relies. [PL 2023, c. 630, §1 (NEW).]

C. "Fabric treatment" means a substance applied to fabric to give the fabric one or more characteristics, including but not limited to stain resistance or water resistance. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

C-1. "Foam" has the same meaning as in section 1613, subsection 1, paragraph K. "Foam" does not include a firefighting or fire-suppressing foam or related product regulated under section 424-C. [PL 2023, c. 630, §1 (NEW).]

D. "Intentionally added PFAS" means PFAS added to a product or one of its product components to provide a specific characteristic, appearance or quality or to perform a specific function. "Intentionally added PFAS" also includes any degradation by-products of PFAS. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

D-1. "Juvenile product" means a product designed or marketed for use by infants and children under 12 years of age including, but not limited to: a baby or toddler foam pillow; bassinet; bedside sleeper; booster seat; changing pad; child restraint system for use in motor vehicles and aircraft; co-sleeper; crib mattress; highchair; highchair pad; infant bouncer; infant carrier; infant seat; infant sleep positioner; infant swing; infant travel bed; infant walker; nap cot; nursing pad; nursing pillow; play mat; playpen; play yard; polyurethane foam mat, pad or pillow; portable foam nap mat; portable infant sleeper; portable hook-on chair; soft-sided portable crib; stroller; and toddler

mattress. "Juvenile product" does not include an adult mattress or an electronic product marketed for use by children under 12 years of age, including a personal computer, audio and video equipment, calculator, wireless telephone, game console, handheld device incorporating a video screen and any associated peripheral, such as a mouse, keyboard, power supply unit or power cord. [PL 2023, c. 630, §1 (NEW).]

D-2. "Known to or reasonably ascertainable by" means, with respect to a person, all information in the person's possession or control as well as all information that a reasonable person similarly situated might be expected to possess, control or know. [PL 2023, c. 630, §1 (NEW).]

E. "Manufacturer" means the person that manufactures a product or whose brand name is affixed to the product. In the case of a product imported into the United States, "manufacturer" includes the importer or first domestic distributor of the product if the person that manufactured or assembled the product or whose brand name is affixed to the product does not have a presence in the United States. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

E-1. "Medical device" has the same meaning as the term "device" as defined in 21 United States Code, Section 321(h). [PL 2023, c. 630, §1 (NEW).]

E-2. "Off-highway vehicle" means a vehicle designed to be or marketed as capable of off-highway operation, including, but not limited to:

- (1) A motorcycle or motor-driven cycle;
- (2) A snowmobile or other vehicle designed to travel over snow or ice;
- (3) A sand buggy, dune buggy or similar all-terrain vehicle;
- (4) A motor vehicle commonly referred to as a jeep; and
- (5) A recreational off-highway vehicle. [PL 2023, c. 630, §1 (NEW).]

E-3. "Outdoor apparel for severe wet conditions" means a clothing item that is an extreme and extended use product designed for outdoor sports experts for applications that provide protection against extended exposure to extreme rain conditions or against extended immersion in water or wet conditions to protect the health and safety of the user and that are not marketed for general consumer use, including, but not limited to, such extreme and extended use products designed for offshore fishing, offshore sailing, whitewater kayaking and mountaineering. [PL 2023, c. 630, §1 (NEW).]

F. "Perfluoroalkyl and polyfluoroalkyl substances" or "PFAS" means substances that include any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

G. "Product" means an item manufactured, assembled, packaged or otherwise prepared for sale to consumers, including its product components, sold or distributed for personal, residential, commercial or industrial use, including for use in making other products. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

H. "Product component" means an identifiable component of a product, regardless of whether the manufacturer of the product is the manufacturer of the component. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

H-1. "Proprietary information" means information that is a trade secret or production, commercial or financial information the disclosure of which would impair the competitive position of the submitter and would make available information not otherwise publicly available. [PL 2023, c. 630, §1 (NEW).]

I. "Publicly owned treatment works" has the same meaning as in section 361-A. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

J. "Refrigerant" has the same meaning as in section 1613, subsection 1, paragraph Y. [PL 2023, c. 630, §1 (NEW).]

K. "Single-use" means, with respect to a product, conventionally disposed of after one use or not sufficiently durable or washable to be, or not intended to be, reusable or refillable. [PL 2023, c. 630, §1 (NEW).]

L. "Ski wax" means a lubricant applied to the bottom of snow runners, including, but not limited to, skis and snowboards, to improve grip or glide properties. "Ski wax" includes related tuning products. [PL 2023, c. 630, §1 (NEW).]

M. "Textile" means an item made in whole or in part from natural or synthetic fiber, yarn or fabric, including, but not limited to, leather, cotton, silk, jute, hemp, wool, viscose, nylon and polyester. "Textile" does not include a single-use absorbent hygiene product or a single-use paper hygiene product, including, but not limited to, toilet paper, paper towels or tissues. [PL 2023, c. 630, §1 (NEW).]

N. "Textile article" means a textile good of a type customarily and ordinarily used in households and businesses. "Textile article" includes, but is not limited to, apparel, accessories, handbags, backpacks, draperies, shower curtains, furnishings, upholstery, beddings, towels, napkins and tablecloths, but does not include:

- (1) A carpet or rug;
- (2) A treatment for use on converted textiles or leathers;
- (3) A textile used in or designed for laboratory analysis and testing;
- (4) A stadium shade or other architectural fabric structure; or
- (5) Filtration media or a filter product used in industrial applications, including, but not limited to, chemical or pharmaceutical manufacturing and environmental control technologies. [PL 2023, c. 630, §1 (NEW).]

O. "Upholstered furniture" means an article of furniture that is designed to be used for sitting, resting or reclining and that is wholly or partly stuffed or filled with any filling material. [PL 2023, c. 630, §1 (NEW).]

P. "Vehicle" means a device by which any person or property may be propelled, moved or drawn upon a way but does not include such a device that is moved exclusively by human power or that is used exclusively upon stationary rails or tracks. [PL 2023, c. 630, §1 (NEW).]

[PL 2023, c. 630, §1 (AMD).]

**2. Notification.** Except as provided pursuant to paragraph D or subsection 3, a manufacturer of a product for sale in the State that contains intentionally added PFAS and for which the department has determined that the use of PFAS in the product is a currently unavoidable use in accordance with subsection 5, paragraph F shall comply with the requirements of this subsection.

A. The manufacturer shall submit to the department a written notification that includes, to the extent known to or reasonably ascertainable by the manufacturer:

- (1) A brief description of the product, including an estimate of the total number of units of the product sold annually in the State or nationally;
- (2) The purpose for which PFAS are used in the product, including in any product components;
- (3) The amount of each of the PFAS, identified by its chemical abstracts service registry number or in the absence of this number a description approved by the department, in the product, reported as an exact quantity, or as the amount of total organic fluorine if the amount of each of the PFAS is not known, determined using commercially available analytical methods

or based on information provided by a supplier as falling within a range approved for reporting purposes by the department or, if the manufacturer is unable to provide information regarding the amount of each of the PFAS in the product, the total weight of the product;

(4) The name and address of the manufacturer, and the name, address and phone number of a contact person for the manufacturer;

(4-A) The identification of the applicable determination adopted by the department by rule pursuant to subsection 5, paragraph F that the use of PFAS in the product is a currently unavoidable use; and

(5) Any additional information required by the department by rule. [PL 2023, c. 630, §1 (AMD).]

A-1. At the time the manufacturer submits to the department the written notice required in paragraph A, the manufacturer shall also pay to the department the applicable fee established by the department by rule pursuant to subsection 6. [PL 2023, c. 630, §1 (NEW).]

B. With the approval of the department, the manufacturer may supply the information required in paragraph A for a category or type of product rather than for each individual product. [PL 2023, c. 630, §1 (AMD).]

C. In accordance with rules adopted by the department, the manufacturer shall update and revise the information in the written notification whenever there is significant change in the information or when requested to do so by the department. [PL 2023, c. 630, §1 (AMD).]

D. The requirements of this subsection do not apply to a manufacturer that employs 100 or fewer people. [PL 2023, c. 630, §1 (AMD).]

[PL 2023, c. 630, §1 (AMD).]

**3. Waiver of notification; coordination with other states.** The department may waive all or part of the notification requirement under subsection 2 if the department determines that substantially equivalent information is already publicly available. The department may enter into an agreement with one or more other states or political subdivisions of a state to collect notifications and may accept notifications to a shared system as meeting the notification requirement under subsection 2.

[PL 2023, c. 630, §1 (AMD).]

**4. Exemptions.** The following are exempt from this section:

A. A product for which federal law governs the presence of PFAS in the product in a manner that preempts state authority; [PL 2023, c. 138, §3 (AMD).]

B. A package, as defined in Title 32, section 1732, subsection 4, for a product, except when the package is the product of the manufacturer. The exemption under this paragraph does not apply to the package of a product prohibited from sale, offer for sale or distribution for sale pursuant to subsection 5, paragraph B, B-1, D or E if that package is a fluorinated container or a container that otherwise contains intentionally added PFAS; [PL 2023, c. 630, §1 (AMD).]

C. A used product or used product component; [PL 2023, c. 630, §1 (AMD).]

D. A firefighting or fire-suppressing foam or related product regulated under section 424-C; [PL 2023, c. 630, §1 (NEW).]

E. A prosthetic or orthotic device or any product that is a medical device, drug or biologic or that is otherwise used in a medical setting or in medical applications that are regulated by or under the jurisdiction of the United States Food and Drug Administration; [PL 2023, c. 630, §1 (NEW).]

F. A veterinary product intended for use in or on animals, including diagnostic equipment or test kits and their components and any product that is a veterinary medical device, drug, biologic or

parasiticide or that is otherwise used in a veterinary medical setting or in veterinary medical applications that are regulated by or under the jurisdiction of:

- (1) The United States Food and Drug Administration;
- (2) The United States Department of Agriculture pursuant to the federal Virus-Serum-Toxin Act; or
- (3) The United States Environmental Protection Agency pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act, except that any such products approved by the United States Environmental Protection Agency pursuant to that law for aerial or land application are not exempt from this section; [PL 2023, c. 630, §1 (NEW).]

G. A product developed or manufactured for the purposes of public health, environmental or water quality testing; [PL 2023, c. 630, §1 (NEW).]

H. A product required to meet standards or requirements of the United States Department of Transportation, Federal Aviation Administration, the National Aeronautics and Space Administration, the United States Department of Defense or the United States Department of Homeland Security, except that the exemption under this paragraph does not apply to any textile article or refrigerant that is included in or as a component part of such products; [PL 2023, c. 630, §1 (NEW).]

I. A motor vehicle or motor vehicle equipment regulated under a federal motor vehicle safety standard, as defined in 49 United States Code, Section 30102(a)(10), and any other motor vehicle, including an off-highway vehicle or specialty motor vehicle, such as an all-terrain vehicle, side-by-side vehicle, farm equipment or personal assistive mobility device, except that the exemption under this paragraph does not apply to any textile article or refrigerant that is included in or as a component part of such products; [PL 2023, c. 630, §1 (NEW).]

J. A watercraft, as defined in Title 12, section 13001, subsection 28, or a seaplane, except that the exemption under this paragraph does not apply to any textile article or refrigerant that is included in or as a component part of such products; [PL 2023, c. 630, §1 (NEW).]

K. A semiconductor, including semiconductors incorporated in electronic equipment, and equipment and materials used in the manufacture of semiconductors; [PL 2023, c. 630, §1 (NEW).]

L. Nonconsumer electronics and nonconsumer laboratory equipment not ordinarily used for personal, family or household purposes; and [PL 2023, c. 630, §1 (NEW).]

M. Equipment directly used in the manufacture or development of the products described in paragraphs E to L. [PL 2023, c. 630, §1 (NEW).]

[PL 2023, c. 630, §1 (AMD).]

**5. Prohibition on sale of products containing intentionally added PFAS.** This subsection governs sales of products containing intentionally added PFAS.

A. Except as provided pursuant to paragraph F or G, effective January 1, 2023, a person may not sell, offer for sale or distribute for sale in this State a carpet or rug that contains intentionally added PFAS. The prohibition under this paragraph does not apply to the sale, offer for sale or distribution for sale of any carpet or rug in used condition. [PL 2023, c. 630, §1 (AMD).]

B. Except as provided pursuant to paragraph F or G, effective January 1, 2023, a person may not sell, offer for sale or distribute for sale in this State a fabric treatment that contains intentionally added PFAS.

The prohibition under this paragraph applies to a fabric treatment that does not contain intentionally added PFAS but that is sold, offered for sale or distributed for sale in a fluorinated container or in

a container that otherwise contains intentionally added PFAS. The prohibition under this paragraph does not apply to the sale, offer for sale or distribution for sale of any fabric treatment in used condition. [PL 2023, c. 630, §1 (AMD).]

B-1. Except as provided pursuant to paragraph F or G, effective January 1, 2026, a person may not sell, offer for sale or distribute for sale in this State:

- (1) A cleaning product containing intentionally added PFAS;
- (2) A cookware product containing intentionally added PFAS;
- (3) A cosmetic product containing intentionally added PFAS;
- (4) Dental floss containing intentionally added PFAS;
- (5) A juvenile product containing intentionally added PFAS;
- (6) A menstruation product containing intentionally added PFAS;
- (7) A textile article containing intentionally added PFAS. The prohibition under this subparagraph does not include:
  - (a) Outdoor apparel for severe wet conditions; or
  - (b) A textile article that is included in or a component part of a watercraft, aircraft or motor vehicle, including an off-highway vehicle;
- (8) Ski wax containing intentionally added PFAS; or
- (9) Upholstered furniture containing intentionally added PFAS.

The prohibition under this paragraph applies to any of the products listed in subparagraphs (1) to (9) that do not contain intentionally added PFAS but that are sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS. The prohibition under this paragraph does not apply to any of the products listed in subparagraphs (1) to (9) that are sold, offered for sale or distributed for sale in used condition. [PL 2023, c. 630, §1 (NEW).]

B-2. Except as provided pursuant to paragraph F or G, effective January 1, 2029, a person may not sell, offer for sale or distribute for sale in this State:

- (1) Artificial turf containing intentionally added PFAS; or
- (2) Outdoor apparel for severe wet conditions containing intentionally added PFAS, unless the apparel is accompanied by a legible, easily discernable disclosure that includes the following statement: "Made with PFAS chemicals." The disclosure requirement under this subparagraph applies to all sales, offers for sale or distributions for sale in this State of outdoor apparel for severe wet conditions containing intentionally added PFAS, including those conducted using the Internet.

The prohibition under this paragraph does not apply to any of the products listed in subparagraphs (1) and (2) that are sold, offered for sale or distributed for sale in used condition. [PL 2023, c. 630, §1 (NEW).]

C. The department may by rule identify products by category or use that may not be sold, offered for sale or distributed for sale in this State if they contain intentionally added PFAS. The department shall prioritize the prohibition of the sale of product categories that, in the department's judgment, are most likely to cause contamination of the State's land or water resources if they contain intentionally added PFAS. The department may not prohibit by rule pursuant to this paragraph the sale, offer for sale or distribution for sale of products in used condition.

Rules adopted pursuant to this paragraph are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A. [PL 2023, c. 630, §1 (AMD).]

D. Except as otherwise provided in this paragraph or pursuant to paragraph F or G, effective January 1, 2032, a person may not sell, offer for sale or distribute for sale in this State any product that contains intentionally added PFAS that is not already prohibited from sale, offer for sale or distribution for sale pursuant to paragraph A, B, B-1, B-2 or C, unless the department has determined by rule in accordance with paragraph F that the use of PFAS in the product is a currently unavoidable use.

The prohibition under this paragraph applies to any such products that do not contain intentionally added PFAS but that are sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS. The prohibition under this paragraph does not apply to:

- (1) Any such products sold, offered for sale or distributed for sale in used condition;
- (2) Cooling, heating, ventilation, air conditioning and refrigeration equipment, including parts and other servicing needs for such equipment; or
- (3) Refrigerants, foams and aerosol propellants that are listed as acceptable, acceptable subject to use conditions or acceptable subject to narrowed use limits by the United States Environmental Protection Agency pursuant to the Significant New Alternatives Policy program, 40 Code of Federal Regulations, Part 82, Subpart G, as long as the refrigerant, foam or aerosol propellant is sold, offered for sale or distributed for sale for the use for which it is listed pursuant to that program. [PL 2023, c. 630, §1 (AMD).]

E. Except as provided pursuant to paragraph F or G, effective January 1, 2040, a person may not sell, offer for sale or distribute for sale in this State:

- (1) Cooling, heating, ventilation, air conditioning or refrigeration equipment that contains intentionally added PFAS; or
- (2) Refrigerants, foams or aerosol propellants that contain intentionally added PFAS.

The prohibition under this paragraph applies to any of the products listed in subparagraphs (1) and (2) that do not contain intentionally added PFAS but that are sold, offered for sale or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS. The prohibition under this paragraph does not apply to any such products sold, offered for sale or distributed for sale in used condition or to parts and other servicing needs for cooling, heating, ventilation, air conditioning or refrigeration equipment, including refrigerants used in the servicing of such equipment as long as the refrigerant is listed as acceptable, acceptable subject to use conditions or acceptable subject to narrowed use limits by the United States Environmental Protection Agency pursuant to the Significant New Alternatives Policy program, 40 Code of Federal Regulations, Part 82, Subpart G and sold, offered for sale or distributed for sale for the use for which the refrigerant is listed pursuant to that program. [PL 2023, c. 630, §1 (NEW).]

F. The department may by rule identify specific products or product categories containing intentionally added PFAS for which it has determined the use of PFAS in the product is a currently unavoidable use. If the department determines by rule that the use of PFAS in a product or product category is a currently unavoidable use:

- (1) The product is exempt from the otherwise applicable prohibition in this subsection, or in the rules adopted pursuant to paragraph C, on the sale, offer for sale or distribution for sale of the product for one of the following periods of time, whichever provides a longer period of exemption:

(a) Five years from the effective date of the rule determining that the use of PFAS in the product or product category is a currently unavoidable use; or

(b) Five years from the effective date of the otherwise applicable prohibition in this subsection or in the rules adopted pursuant to paragraph C; and

(2) A manufacturer of the product that sells, offers for sale or distributes for sale the product in this State shall comply with the notification requirement of subsection 2. [PL 2023, c. 630, §1 (NEW).]

G. The prohibitions in this subsection do not apply to a retailer in the State unless the retailer sells, offers for sale or distributes for sale a product containing intentionally added PFAS in the State for which the retailer has received a notification pursuant to subsection 8, paragraph B that the sale of the product is prohibited. [PL 2023, c. 630, §1 (NEW).]

[PL 2023, c. 630, §1 (AMD).]

**6. Fees.** The department may establish by rule and assess a fee payable by a manufacturer that is required to comply with the notification requirement of subsection 2 to cover the department's reasonable costs in administering the requirements of this section. Notwithstanding Title 5, section 8071, rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

[PL 2023, c. 630, §1 (AMD).]

**7. Failure to provide notice.** Beginning January 1, 2032, a person may not sell, offer for sale or distribute for sale in the State a product containing intentionally added PFAS for which the department has determined that the use of PFAS in the product is a currently unavoidable use pursuant to subsection 5, paragraph F if the manufacturer of the product has failed to provide the information required under subsection 2. This prohibition does not apply to a retailer in the State unless the retailer sells, offers for sale or distributes for sale a product containing intentionally added PFAS in the State for which the retailer has received a notification pursuant to subsection 8, paragraph B that the sale of the product is prohibited.

A. [PL 2023, c. 630, §1 (RP).]

B. [PL 2023, c. 630, §1 (RP).]

C. [PL 2023, c. 630, §1 (RP).]

D. [PL 2023, c. 630, §1 (RP).]

E. [PL 2023, c. 630, §1 (RP).]

[PL 2023, c. 630, §1 (AMD).]

**8. Certificate of compliance.** If the department has reason to believe that a product contains intentionally added PFAS and is being sold, offered for sale or distributed for sale in violation of subsections 5 or 7, the department may direct the manufacturer of the product to, within 30 days:

A. Provide the department with a certificate attesting that the product does not contain intentionally added PFAS; or [PL 2023, c. 630, §1 (AMD).]

B. Notify persons that sell, offer for sale or distribute for sale the product in this State that the sale of the product is prohibited in this State and provide the department with a list of the names and addresses of those persons notified. [PL 2023, c. 630, §1 (AMD).]

[PL 2023, c. 630, §1 (AMD).]

**9. PFAS source reduction program.** To the extent funds are available and in consultation with relevant stakeholders, the department shall develop and implement a program to reduce the presence of PFAS in discharges to air, water and land by encouraging the use of alternatives to and the proper management of materials containing PFAS. The program may include:

A. Information resources targeted to industrial or commercial users of PFAS; [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

B. Education of the general public; [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

C. To the extent funds are available, grants to operators of publicly owned treatment works for the purposes of developing, expanding or implementing pretreatment standards for PFAS and education of users on sources of PFAS and proper management; [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

D. To the extent funds are available, grants to municipalities for the purposes of educating solid waste disposal users on sources of PFAS and proper management; and [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

E. Other efforts determined by the department to be prudent to achieve the program's purpose. [PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]  
[PL 2023, c. 630, §1 (AMD).]

**10. Rules.** The department shall adopt rules to implement this section. Except as provided in subsection 5, paragraph C, rules adopted to implement this section are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

[PL 2021, c. 477, §1 (NEW); RR 2021, c. 1, Pt. A, §54 (RAL).]

**11. Report.** By January 1, 2026, and biennially thereafter, the department shall submit to the joint standing committee of the Legislature having jurisdiction over environment and natural resources matters a report regarding the implementation of this section and other state and federal laws governing the presence of PFAS in products, including any recommendations for necessary legislative changes to this section. After reviewing the report, the committee may report out legislation relating to the report. [PL 2023, c. 630, §1 (NEW).]

**12. Proprietary information.** Proprietary information submitted to the department by a manufacturer pursuant to the requirements of this section that is identified by the manufacturer as proprietary information is confidential and must be handled by the department in the same manner as confidential information is handled under section 1310-B.

[PL 2023, c. 630, §1 (NEW).]

## SECTION HISTORY

PL 2021, c. 477, §1 (NEW). RR 2021, c. 1, Pt. A, §54 (RAL). PL 2023, c. 138, §§1-4 (AMD).  
PL 2023, c. 630, §1 (AMD).

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# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZF13-Y8K4R, version 1)

## Details

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**Submission ID** HQC-ZF13-Y8K4R

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**

Olivier

**Last Name**

BRAULT

**Title**

President

**Organization Name**

FEC - Federation of the European Cookware and Cutlery Industries

**Phone Type**

Business

**Number**

17623851770

**Extension**

+49

**Email**

president@fecassociation.eu

**Mailing Address**

39-41 Rue Louis Blanc

Courbevoie, FRANCE 92400

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

#### 2a. Product Category

**Product Category Name**

Cookware product

**The descriptive name of the product.**

Fluoropolymer-coated non-stick cookware and bakeware

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

Fluoropolymer-coated non-stick cookware are products such as pots, pans, or dishes in which food can be cooked. Most often, they are composed by:

- ◆ A metallic part covered by a coating made of fluoropolymers with non-stick property preventing food from sticking during cooking
- ◆ Handles.

They are intended to be used on different heat sources such as stoves and the like.

Fluoropolymer-coated non-stick bakeware are products that are containers intended to bake food in an oven. It includes items used to prepare baked goods like cakes, cookies, bread, muffins, pies; etc. They are composed of a metallic part covered by a non-stick coating made of fluoropolymer with non-stick property.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
73040400 Cookware/Bakeware

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
7615

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

332215-Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

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Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Fluoropolymer-coated non-stick cookware has a range of properties which have made them a unique combination and the preferred choice for consumers, but as well essential for their health safety and functioning of society. See in the attached the complete explanation.

**If needed, attach additional information.**

<a href="#">Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - chapter 3.docx - 05/30/2025 09:38 AM</a>
<b>Comment</b>
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

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**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

Fluoropolymers, unlike non-polymeric PFAS, play a critical role in non-stick cookware thanks to their unique combination of properties that make such products both safe and durable. Thank to its molecular structure that is highly stable, non-mobile, and non-bioaccumulative, PTFE cannot cross the gastrointestinal barrier or enter human cells and if it is ingested, it would be secreted as is. As a result, its use in food contact materials poses no identified risk to human health. This inherent safety is complemented by distinguished performance characteristics, including non-stick behavior, chemical and abrasion resistance, and resistance to heat and corrosion, which collectively ensure long-lasting (cookware and home appliance) product performance and contribute to healthier cooking practices over time. The unique functionality of fluoropolymers in cookware is not incidental, as it is essential to deliver reliable, high-quality, and health-conscious products. These materials enable a standard of convenience and longevity that cannot currently be matched by any other alternatives. Further, it is important to distinguish long-lasting, purpose-driven consumer products from consumable goods, where PFAS are often used in single-use items without the same functional justification.

For consumers, fluoropolymer-coated non-stick cookware offers superior non-stick performance, durability, and abrasion resistance resulting in longer product lifespan. No material offers the same combination of properties including ceramic see chapter 5.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Due to their chemical structure fluoropolymers demonstrate valuable properties including chemical, biological, and thermal stability, heat and chemical resistance, unique dielectric properties, and durability. Additional fluoropolymer properties include fire resistance, weather resistance, non-wetting, and non-stick (Korzeniowski et.al., 2022).

Fluoropolymers are regarded as irreplaceable in many applications because their unique combination of specific properties, which are critical to ensure optimal performance in many applications, cannot be achieved or guaranteed by alternative materials (Henry et al., 2018).

Fluoropolymers are one of the very few materials that meet system performance needs in high temperature and harsh chemical environments (Huber et al., 2019).

PTFE is generally superior to other fluoropolymers with respect to properties and performances, that has been extensively tested to comply with US and EU food contact and global medical device regulations (e.g., USFDA, CFDA, Korea MFDS, Japan PMDA), including ISO 10993 biocompatibility testing and preclinical animal testing.

Its chemical inertness and excellent thermal stability ensure that it does not react with food or degrade at typical cooking temperatures, preserving both food safety and material performance. Its smooth surface and low coefficient of friction enable outstanding non-stick functionality, reducing the need for oils and fats, and making cleanup easier. Additionally, the extremely low levels of residual monomers, oligomers, and low molecular weight leachables ensure that fluoropolymer-coated non-stick cookware meets stringent safety standards, minimizing the risk of contamination during food preparation. These properties, supported by studies such as Ebnesajjad (2011), Olabisi and Adewale (2015), and Henry et al. (2018), contribute to such fluoropolymer's continued preference in the food sector, where cleanliness, safety, and reliability are critical.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
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**5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

Traditional materials, such as cast iron, stainless steel, or untreated aluminum, lack inherent non-stick properties. While these materials may offer advantages in heat retention or durability, they typically require regular seasoning or the addition of oil to prevent food from sticking. As such, they do not meet the expectations of consumers seeking convenience and low-maintenance cooking. They are not alternatives to fluoropolymer-based non-stick surface.

Ceramic coatings are wrongly perceived as a workable substitute for fluoropolymer-based non-stick surfaces used in cookware. Numerous studies and consumer evaluations consistently show that ceramic coatings fall short of fluoropolymers, particularly in terms of non-stick durability and overall longevity (refer to point b of Q5). As a result, ceramic-coated non-stick surfaces in cookware typically require more frequent replacement, which can lead to greater environmental impact and higher long-term costs for consumers. Therefore, ceramic coatings are not a workable substitute for fluoropolymer-based non-stick surfaces in cookware. It also has to be noted that the potential impacts of ceramic coating should be evaluated with the same rigor applied to PFAS.

[REDACTED]

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

At present, ceramic-coated non-stick cookware have not achieved the same level of non-stick durability and performance as fluoropolymers:

- 1- According to a study by Rossi et al, the C-F bond in fluoropolymers provides superior self-lubrication and non-stick properties, and chemical and thermal resistance compared to sol-gel ceramic coatings (Rossi et al., 2022).
- 2- This study demonstrated also that the main concern with sol-gel non-stick coatings is their reliability over long periods of usage and when subjected to wear. Unlike fluoropolymers coatings, ceramic coatings are not intrinsically non-stick, relying only on the action of the functionalized groups of the topcoat, which can be easily removed by everyday usage. This makes ceramic coatings more susceptible to abrasion, degradation, and loss of performance, contributing to their inferior quality in terms of non-stick durability.
- 3- Sol-gel coatings, despite being proposed as valid alternatives to fluoropolymer ones, do not achieve the same quality standards in terms of releasing properties, being in addition much more sensible to degradation and loss in performances. (Rossi et al., 2022)
- 4- Consumer evaluations of ceramic and fluoropolymer-coated cookware show that ceramic-coated non-stick cookware requires replacement more often due to lower durability, resulting in a potentially larger environmental impact and price inflation for consumers (Palermo, A., 2020).

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

[REDACTED]

[REDACTED]

[REDACTED]

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

[REDACTED]

[REDACTED]

[REDACTED]

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Siloxane monomers are essential precursors in the production of silicone polymers, which are widely used across industrial sectors, including in the manufacturing of so-called ceramic coatings for food contact purposes. While the production of these monomers and the formulation of silicone-based polymers occur on a global scale and increasing concerns have also led to their regulatory scrutiny.

Given both the performance limitations of ceramic-coated non-stick cookware alternatives as laid down in point b of Question 5, and the intensifying regulatory scrutiny of siloxanes monomers that are needed to produce the silicone oil embedded in ceramic coating, ceramic coatings does not appear as a workable substitute for fluoropolymer-based non-stick cookware.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

This section focuses on the manufacturing of non-stick cookware.

The Fluoropolymers Product Group (FPG), a European-based association of global fluoropolymer manufacturers, reports that producers now employ advanced recovery technologies at the production stage to dramatically reduce residual primary non-polymeric PFAS. These technologies are complemented by strict safety and environmental management measures during the formulation of coatings, where emissions from fluoropolymer-containing dispersions are carefully prevented. This approach aligns with a fluoropolymers manufacturing commitment to achieve the Average Emission Factors of non-polymeric PFAS residues from polymerization aid technology used in the fluoropolymer manufacturing process of 0.003% to air and 0.0006% to water by 2030 (FPG Manufacturing Programme, 2023).

Further, non-polymeric PFAS are deliberately introduced during article manufacture. Any fluorinated polymerization aids remain only as trace residues (polymer suppliers' declarations attest that state-of-the-art dispersions contain less than 1 ppm of fluorinated surfactants, a level below current analytical detection limits), and manufacturers address the few potential emission points for these aids or for fluoropolymer dust with stringent environmental-management measures such as fully enclosed process chambers, high-efficiency filtration systems, and dedicated capture-and-treatment units that together ensure releases to air, water, and waste streams stay well below regulatory thresholds.

See additional information in the enclosed file

**Attach supporting documentation if necessary,**

[Maine DEP MELS System - PFAS - CUU Proposal Cookware\\_FEC submission - chapter 5.docx - 05/30/2025 09:39 AM](#)

**Comment**

Question a-paragraph 3, c, d are confidential

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

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**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

Minnesota is the only state in the country where a ban on the sale and distribution of non-stick cookware and bakeware has already taken effect.

There are also several states in the country that have excluded non-stick cookware from PFAS product bans. New Mexico recently signed into law HB 212 which excludes fluoropolymer coated products (such as non-stick cookware). California is currently debating SB 682, and Ohio is considering HB 272: both bills exclude fluoropolymer coated products. Illinois is finalizing HB 2516, which excludes non-stick cookware from PFAS product bans. Delaware and West Virginia have also exempted fluoropolymers from their PFAS regulation.

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
------------------	-----------------------	----------------------	------------------	----------------------------	-----------------

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

What are often considered to be alternatives to PTFE-coated, non-stick cookware and bakeware have properties that would introduce negative and unintended consequences to Maine consumers or businesses that use them:

[REDACTED]

[REDACTED]

[REDACTED]

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

Confidential Attachment  
**Reason for Confidentiality**  
Contain critical technical information  
**Comment**  
Confidential

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

PFAS used in cookware are fluoropolymers. They are recognized by authorities as Food Compliant materials:

- FDA: Code of Federal Regulations, Title 21, Section 177.1550 (CFR - Title 21, FDA).
- European Union: Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

The use of fluoropolymers in cookware is recognized by authorities and numerous organizations as posing no harm to human health:

- European Food Safety Agency (EFSA): EFSA's Scientific Committee noted that the risk assessment of polymers used in food additives—those that can be ingested—must consider molecular weight (i.e., size). EFSA states that polymers are unlikely to be absorbed through the gastrointestinal barrier and are therefore not considered a health hazard (EFSA Journal, 2016).
- German Federal Institute for Risk Assessment (BfR BAuA): The BfR has no data which would indicate that, under normal usage conditions (no overheating), any PTFE-coated cookware, ovenware or frying pans currently available on the market transfer fluorinated chemicals to food in quantities suitable for endangering human health. Selected questions and answers on cookware, ovenware and frying pans with a non-stick coating made of PTFE (FAQ, 18 December 2018).

See additional information the enclosed file.

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

During cookware usage phase, consumers are exposed to negligible amount of PFAS through the food being prepared:

- FDA: The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of cookware. Studies show negligible amounts of PFAS in this coating can migrate to food (Authorized Uses of PFAS in Food Contact Applications, FDA).
- EFSA confirmed that fluoropolymers in contact with food are not a major source of PFAS exposure. While some migration to food is possible, the quantity would be minimal—on the order of micrograms per kilogram (g/kg)—a level significantly lower than the background levels of PFAS typically found in food, which remain the primary source of exposure (Risk to Human Health Related to the Presence of Perfluoroalkyl Substances in Food, 9 July 2020).
- Environmental Working Group (EWG), EWG emphasized that PTFE is not a significant source of exposure: But even though it's always been the poster child for PFAS exposure, this cookware is not anticipated to be a major source of exposure. (Top 3 Ways to Reduce PFAS Exposure, EWG).

During normal use, part of the coating may peel off; however, this does not pose a health risk due to the inert nature of fluoropolymers:

- German Federal Institute for Risk Assessment (BfR BAuA) : It is still safe to health if minute particles are released from scratched coatings and swallowed when eating. As PTFE is inert, these particles are not digested and are excreted from the body unchanged (FAQ, 18 December 2018).

Therefore, human exposure to PFAS used in cookware is negligible and does not impact human health.

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

PFAS used in cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact:

- Interstate Technology & Regulatory Council (ITRC), September 2023: Stable, insoluble fluoropolymer such as PTFE may pose little environmental, ecological, or health risk once it is in a product. (Full PFAS Guidance, December 2023).

Therefore, PFAS used in cookware are fluoropolymers, recognized as stable, chemically inert materials and therefore they pose negligible environmental impact.

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

During manufacturing phase, fluoropolymers manufacturers are committed to apply best available techniques to limit emissions:

- Fluoropolymer Professional Association (FPG) including major US manufacturers have communicated in March 2025 about their achievements and continued efforts FPG. (Statement on the Manufacturing Programme 2025 - Plastics Europe).

During consumer use phase, the release of PFAS in the environment is negligible:

- FDA: The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of the small kitchen appliance. Studies show negligible amounts of PFAS in this coating can migrate to food (Authorized Uses of PFAS in Food Contact Applications, FDA).
- PFAS used in cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact: see Interstate Technology & Regulatory Council (ITRC), September 2023: stable, insoluble fluoropolymer such as PTFE may pose little environmental ecological or health risk once it is in a product (Full PFAS Guidance, December 2023).

See additional information in the enclosed file.

**If needed, attach additional information.**

Maine DEP MELS System - PFAS - CUU Proposal Cookware\_FEC submission - chapter 8.docx - 05/30/2025 09:41 AM

**Comment**

NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

In the United States, 47% of cookware are recycled; This lower number can be explained in particular by a higher level of donations than in the rest of the surveyed countries (15%).

However, according to a study of a cookware manufacturer carried out in 2024, two-thirds of consumers say they prefer channels that allow the recycling of kitchen utensils (waste disposal centre, domestic recycling, instore deposit).

This proportion is 47% in the USA (and rises to 73% in France or 80% in Sweden). In other cases, kitchen utensils are thrown away with household waste.

**Additional Supportive Attachments**

Maine DEP MELS System - PFAS - CUU Proposal Cookware\_FEC submission - Chapter 9.docx - 05/30/2025 09:41 AM

**Comment**

NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Landfill

Other: See enclosed file for additional information.

**c. The recycling rate of the product.**

80

**10. This section relates to Confidential Business Information.**

**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

Section Number	Question Letter
5	a, 3rd paragraph
5	c
5	d
7	c, 2nd paragraph

**Attachments**

Date	Attachment Name	Context	Confidential?	User
5/30/2025 9:41 AM	Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - Chapter 9.docx	Attachment	No	Olivier Brault
5/30/2025 9:41 AM	Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - chapter 8.docx	Attachment	No	Olivier Brault
5/30/2025 9:40 AM	Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - chapter 7.docx	Attachment	Yes	Olivier Brault
5/30/2025 9:39 AM	Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - chapter 5.docx	Attachment	No	Olivier Brault
5/30/2025 9:38 AM	Maine DEP MELS System - PFAS - CUU Proposal Cookware_FEC submission - chapter 3.docx	Attachment	No	Olivier Brault

**Status History**

	<b>User</b>	<b>Processing Status</b>
5/30/2025 8:48:31 AM	Olivier Brault	Draft
5/30/2025 10:00:20 AM	Olivier Brault	Submitted
5/30/2025 10:00:22 AM	Olivier Brault	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZR29-9YFEB, version 1)

## Details

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**Submission ID** HQC-ZR29-9YFEB

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Stephen              Burns

**Title**

President

**Organization Name**

Cookware Sustainability Alliance

**Phone Type**    **Number**              **Extension**

Business            916-384-7507

**Email**

steve@cookwaresustainabilityalliance.org

**Mailing Address**

621 Capitol Mall

Ste 1400

Sacramento, CA 95814

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

#### 2a. Product Category

**Product Category Name**

Cookware product

**The descriptive name of the product.**

Fluoropolymer-coated non-stick cookware and bakeware

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

Fluoropolymer-coated non-stick cookware are products such as pots, pans, or dishes in which food can be cooked. Most often, they are composed of:

- ◆ A metallic part covered by a coating made of fluoropolymers with non-stick properties preventing food from sticking during the cooking process; and
- ◆ Handles.

They are intended to be used on different heat sources such as stoves.

Fluoropolymer-coated non-stick bakeware are products that are containers intended to bake food in an oven. They include items used to prepare baked goods like cakes, cookies, bread, muffins, pies; etc. They are composed of a metallic part covered by a non-stick coating made of fluoropolymer with non-stick properties.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
Class 73040400 Cookware/Bakeware

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
7323
7615
8205

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

332215-Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

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Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Fluoropolymer-coated non-stick cookware has a range of properties that have resulted in a unique combination that make them the preferred choice for consumers. These properties are also essential for consumers' health and safety when cooking or baking. The ability to cook and feed oneself is a strong component of a healthy functioning society.

The key properties are that Fluoropolymers:

- Create strong non-stick surfaces thanks to the exceptionally strong Carbon-Fluorine bond, which has the highest bond energy among all organic compounds;
- Are chemical and abrasion resistant;
- Are heat resistant. Pyrolysis of food starts at 350 °F, while PTFE is known to start to deteriorate at an extremely slow rate above 500 °F. In other words, food left on a pan or in an oven for prolonged periods of time would burn and smoke far sooner than the pan itself might begin to.
- Are corrosion resistant and have overall durability; and
- Promote healthy and safe cooking because no oil is needed. Improper use of oils in cooking is a leading contributor to residential fires.

**If needed, attach additional information.**

Fluoropolymer properties.docx - 05/30/2025 05:52 PM

**Comment**

NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

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**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

Fluoropolymers, unlike non-polymeric PFAS which are the typical PFAS of concern like PFOA and PFOS, play a critical role in non-stick cookware thanks to their unique combination of properties that result in safe and durable products. PTFE's molecular structure is highly stable, non-mobile, and non-bioaccumulative, meaning it cannot cross the gastrointestinal barrier or enter human cells and if it is ingested; it would be secreted as is. As a result, PTFE's use in food contact materials poses no identified risk to human health. This inherent safety is complemented by distinguished performance characteristics, including non-stick behavior, chemical and abrasion resistance, and resistance to heat and corrosion, which collectively ensure long-lasting (cookware and home appliance) product performance and contribute to healthier cooking practices over time. The unique functionality of fluoropolymers in cookware is not incidental, as it is essential to deliver reliable, high-quality, and health-conscious products. These materials enable a standard of convenience and longevity that cannot currently be matched by any other alternatives. Further, it is important to distinguish long-lasting, purpose-driven consumer products from consumable goods, where PFAS are often used in single-use items without the same functional justification.

Ceramic coatings cannot and should not be perceived as a workable alternative to fluoropolymer-based non-stick cookware, nor should other materials such as cast iron, aluminum, or stainless steel, as such do not offer inherent similar non-stick properties. And while cast iron, aluminum, and stainless-steel cookware may share some of the advantages of fluoropolymer-coated non-stick cookware in terms of durability and heat distribution, they typically require substantial seasoning or the use of oil to prevent food from sticking, making them less convenient and possible increased costs for everyday non-stick cooking.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Due to their chemical structure fluoropolymers demonstrate valuable properties including chemical, biological, and thermal stability, heat and chemical resistance, unique dielectric properties, and durability. Additional fluoropolymer properties include fire resistance, weather resistance, non-wetting, and non-stick (Korzeniowski et.al., 2022).

Fluoropolymers are regarded as irreplaceable in many applications because their unique combination of specific properties, which are critical to ensure optimal performance in many applications, cannot be achieved or guaranteed by alternative materials (Henry et al., 2018).

Fluoropolymers are one of the very few materials that meet system performance needs in high temperature and harsh chemical environments (Huber et al., 2019).

PTFE is the most widely used fluoropolymer, belonging to the group of perfluorinated polymers and generally superior to other fluoropolymers with respect to properties and performances. This substance has been extensively tested to comply with US and EU food contact and global medical device regulations (e.g., USFDA, CFDA, Korea MFDS, Japan PMDA), including ISO 10993 biocompatibility testing and preclinical animal testing.

Federal regulations at the U.S. Food & Drug Administration (21 CFR 175.300) have authorized specific types of PFAS substances for use in food contact applications. The FDA has determined that PTFE cookware is safe to use due to the highly polymerized coating bound to the surface of the cookware and studies showing negligible amounts of PFAS in this coating migrating to food, and that polymerized or large molecule PFAS are not absorbed by the human body when ingested. (updated 2024)

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

**5. Description of reasonably available alternatives for this specific use of PFAS.**

---

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the

following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

Other forms of cookware and bakeware, such as cast iron, stainless steel, or untreated aluminum, lack inherent non-stick properties. While these materials may offer advantages in heat retention or durability, they typically require regular seasoning or the addition of oil to prevent food from sticking. As such, they do not meet the expectations of consumers seeking convenience and low-maintenance cooking. They are not viable alternatives to fluoropolymer-based non-stick surface.

[REDACTED]

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

At present, ceramic-coated non-stick cookware have not achieved the same level of non-stick durability and performance as fluoropolymers:

1- According to a study by Rossi et al, the C-F bond in fluoropolymers provides superior self-lubrication and non-stick properties, and chemical and thermal resistance compared to sol-gel ceramic coatings (Rossi et al., 2022).

2- This study demonstrated also that the main concern with sol-gel non-stick coatings is their reliability over long periods of usage and when subjected to wear. Unlike fluoropolymers coatings, ceramic coatings are not intrinsically non-stick, relying only on the action of the functionalized groups of the topcoat, which can be easily removed by everyday usage. This makes ceramic coatings more susceptible to abrasion, degradation, and loss of performance, contributing to their inferior quality in terms of non-stick durability.

3- Sol-gel coatings, despite being proposed as valid alternatives to fluoropolymer ones, do not achieve the same quality standards in terms of releasing properties, being in addition much more sensible to degradation and loss in performances. (Rossi et al., 2022)

4- Consumer evaluations of ceramic and fluoropolymer-coated cookware show that ceramic-coated non-stick cookware requires replacement more often due to lower durability, resulting in a potentially larger environmental impact and price inflation for consumers (Palermo, A., 2020).

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

[REDACTED]

[REDACTED]

[REDACTED]

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

[REDACTED]

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Siloxane monomers are essential precursors in the production of silicone polymers, which are widely used across industrial sectors, including in the manufacturing of so-called ceramic coatings for food contact purposes. While the production of these monomers and the formulation of silicone-based polymers occur on a global scale and increasing concerns have also led to their regulatory scrutiny.

Given both the performance limitations of ceramic-coated non-stick cookware alternatives as articulated in point b of Question 5, and the intensifying regulatory scrutiny of siloxanes monomers that are needed to produce the silicone oil embedded in ceramic coating, ceramic coatings do not appear as workable substitutes for fluoropolymer-based non-stick cookware.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

The Fluoropolymers Product Group (FPG), a European-based association of global fluoropolymer manufacturers, reports that producers now employ advanced recovery technologies at the production stage to dramatically reduce residual primary non-polymeric PFAS. These technologies are complemented by strict safety and environmental management measures during the formulation of coatings, where emissions from fluoropolymer-containing dispersions are carefully prevented. This approach aligns with a fluoropolymers manufacturing commitment to achieve the Average Emission Factors of non-polymeric PFAS residues from polymerization aid technology used in the fluoropolymer manufacturing process of 0.003% to air and 0.0006% to water by 2030 (FPG Manufacturing Program, 2023).

No non-polymeric PFAS are deliberately introduced during article manufacture. Any fluorinated polymerization aids remain only as trace residues (polymer suppliers' declarations attest that state-of-the-art dispersions contain less than 1 ppm of fluorinated surfactants, a level below current analytical detection limits), and manufacturers address the few potential emission points for these aids or for fluoropolymer dust with stringent environmental-management measures such as fully enclosed process chambers, high-efficiency filtration systems, and dedicated capture-and-treatment units that together ensure releases to air, water, and waste streams stay well below regulatory thresholds.

Further, non-fluorinated polymerization aid (NFPA) technologies, which enable the production of fluoropolymers without relying on fluorinated polymerization aids, offer significant potential to substantially reduce the presence of non-polymeric PFAS in the manufacturing process. NFPA technologies are being used today and beginning to proliferate across the chemical manufacturing sector.

**Attach supporting documentation if necessary,**

[Reasonably Available Alternatives.docx - 05/30/2025 06:48 PM](#)

**Comment**

NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

---

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

Minnesota is the only state in the country where a ban on the sale and distribution of non-stick cookware and bakeware has already taken effect.

There are also several states in the country that have excluded non-stick cookware in PFAS product ban laws, though none has taken effect yet:

- New Mexico recently signed into law HB 212 which excludes fluoropolymer coated products (such as non-stick cookware).
- California is currently debating SB 682, and Ohio is moving HB 272: both of these PFAS product ban bills currently exclude fluoropolymer-coated products.
- Illinois is finalizing HB 2516, which excludes non-stick cookware from PFAS product bans.
- Delaware and West Virginia have exempted fluoropolymers from their PFAS regulatory definitions.

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
Cookware product	none	NONE PROVIDED	NONE PROVIDED		

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

What are often considered to be alternatives to PTFE-coated, non-stick cookware and bakeware have properties that would introduce negative and unintended consequences to Maine consumers or businesses that use them:



Just as important, however, is the fact that the long-term effects of the oils used in ceramic coating have not been studied nearly as long as PTFE has. It would be paradoxical to require Maine consumers switch to an alternative whose effects are not well known whilst sacrificing PTFE coatings that are known to be safe. Banning and replacing one product with another that has not been subjected to the same heightened scrutiny risks a rushed public policy that can lead to unintended outcomes, this would lead to a regrettable substitution. Crafting public policy that bans and replaces one product with another that has not been thoroughly tested is risky, to say the least.

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

## 8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.

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### a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.

PFAS used in cookware are limited to fluoropolymers. Fluoropolymers are recognized by various regulatory authorities, including but not limited to the US-FDA, as Food Compliant materials:

- US-FDA: Code of Federal Regulations, Title 21, Section 177.1550 (CFR - Title 21, FDA).
- European Union: Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

The use of fluoropolymers in cookware is recognized by authorities and numerous organizations as posing no harm to human health:

- European Food Safety Agency (EFSA): EFSA's Scientific Committee noted that the risk assessment of polymers used in food additives those that can be ingested must consider molecular weight (i.e., size). EFSA states that polymers are unlikely to be absorbed through the gastrointestinal barrier and are therefore not considered a health hazard (EFSA Journal, 2016).
- German Federal Institute for Risk Assessment (BfR BAuA): The BfR has no data which would indicate that, under normal usage conditions (no overheating), any PTFE-coated cookware, ovenware or frying pans currently available on the market transfer fluorinated chemicals to food in quantities suitable for endangering human health. Selected questions and answers on cookware, ovenware and frying pans with a non-stick coating made of PTFE (FAQ, 18 December 2018).

### b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.

During cookware usage phase, consumers are exposed to, at most, a negligible amount of PFAS through the food being prepared with fluoropolymer-coated non-stick cookware:

- US-FDA: The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of cookware. Studies show negligible amounts of PFAS in this coating can migrate to food (Authorized Uses of PFAS in Food Contact Applications, US-FDA).
- EFSA confirmed that fluoropolymers in contact with food are not a major source of PFAS exposure. While some migration to food is possible, the quantity would be minimal on the order of micrograms per kilogram (g/kg) a level significantly lower than the background levels of PFAS typically found in food, which remain the primary source of exposure (Risk to Human Health Related to the Presence of Perfluoroalkyl Substances in Food, 9 July 2020).

### c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.

PFAS used in cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore they pose a negligible environmental impact:

- Interstate Technology & Regulatory Council (ITRC), September 2023: Stable, insoluble fluoropolymer such as PTFE may pose little environmental, ecological, or health risk once it is in a product. (Full PFAS Guidance, December 2023).

Therefore, PFAS used in cookware are fluoropolymers, recognized as stable, chemically inert materials and therefore they pose negligible environmental impact.

### d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.

During the manufacturing phase, fluoropolymers manufacturers are committed to apply best available techniques to limit emissions:

- Fluoropolymer Professional Association (FPG) including major US manufacturers have communicated in March 2025 about their achievements and continued efforts FPG. (Statement on the Manufacturing Program 2025 - Plastics Europe).

During the consumer use phase, the release of fluoropolymers to the environment is negligible:

- US-FDA: The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of the small kitchen appliance. Studies show negligible amounts of PFAS in this coating can migrate to food (Authorized Uses of PFAS in Food Contact Applications, US-FDA).
- PFAS used in cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact: see Interstate Technology & Regulatory Council (ITRC), September 2023: stable, insoluble fluoropolymer such as PTFE may pose little environmental ecological or health risk once it is in a product (Full PFAS Guidance, December 2023).

### If needed, attach additional information.

[Impacts on Human Health or the Environment.docx - 05/30/2025 06:53 PM](#)

#### Comment

NONE PROVIDED

## 9. This section relates to the product's fate at the end of its lifecycle.

### a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.

In the United States, 47% of cookware are recycled. This relatively low number is still higher than the level of cookware in other surveyed countries (15%).

However, according to a study of a cookware manufacturer carried out in 2024, two-thirds of consumers say they prefer channels that allow the recycling of kitchen utensils (waste disposal centers, domestic recycling, instore deposit).

This proportion for utensils is also 47% in the USA (and rises to 73% in France or 80% in Sweden). In some other cases, kitchen utensils are thrown away with household waste.

### Additional Supportive Attachments

NONE PROVIDED

#### Comment

NONE PROVIDED

### b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?

Landfill

### c. The recycling rate of the product.

80

## 10. This section relates to Confidential Business Information.

### 1. Please list the section (number) and question (letter) of submission information which contains confidential business information.

Section Number	Question Letter
5	a, 3
5	c and d
7	c, 2

## Attachments

Date	Attachment Name	Context	Confidential?	User
5/30/2025 6:53 PM	Impacts on Human Health or the Environment.docx	Attachment	No	Stephen Burns
5/30/2025 6:48 PM	Reasonably Available Alternatives.docx	Attachment	No	Stephen Burns
5/30/2025 5:52 PM	Fluoropolymer properties.docx	Attachment	No	Stephen Burns

## Status History

	User	Processing Status
5/30/2025 5:26:00 PM	Stephen Burns	Draft
5/30/2025 6:59:08 PM	Stephen Burns	Submitted
5/30/2025 6:59:12 PM	Stephen Burns	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-JS1V-7C75E, version 1)

## Details

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**Submission ID** HQC-JS1V-7C75E

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Yohann              BOILEAU

**Title**

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**Organization Name**

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#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

#### 2a. Product Category

**Product Category Name**

Cookware product

**The descriptive name of the product.**

Non-stick fluoropolymer-coated cookware and bakeware

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

This proposal is related to non-stick fluoropolymer-coated cookware and bakeware.

Non-stick fluoropolymer-coated cookware category covers products such as pots, pans, or dishes. They are composed by :

◆ A coated metallic part. The coating is made of fluoropolymers which provides the non-stick property because it prevents food from sticking on the cooking surface

◆ Handles.

They can be used on various heat sources such as stoves and the like.

Non-stick fluoropolymer-coated bakeware category covers products that are containers designed to bake food in a heated cavity e.g. oven. It also covers devices designed to bake food like pastry i.e. cakes, cookies, bread, muffins, pies; etc. They are also composed by a coated metallic part. The coating is made of fluoropolymers which provides the non-stick property.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
73040400 Cookware/Bakeware

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
7615

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

332215-Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

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Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Non-stick fluoropolymer-coated cookware offers a unique combination of properties that not only make it a preferred choice for consumers but also contribute significantly to health safety and the smooth functioning of society.

Some key functions of such substances in a non-stick cookware application:

- Non-stick: an exceptionally strong carbon-fluorine (C-F) bond, the strongest in organic chemistry, PTFE exhibits outstanding self-lubricating and non-stick properties, along with excellent chemical and thermal resistance (cf. Rossi et al., 2022). As a result, the fluoropolymer PTFE is inherently non-stick, offering low or no fat use during cooking, ensuring predictable results by preserving food texture and preventing burning, and allowing for easy cleaning with reduced detergent and water use.
- Abrasion resistance: fluoropolymer-coatings have high abrasion resistance, due to the combination of the coating's ductility, adhesion, and low friction.
- Heat resistance: Pyrolysis of food starts at 350 °F, while PTFE is known to start to deteriorate at an extremely slow rate above 500 °F. Above 680 °F, the degradation of PTFE starts to be measurable. It is unreasonable to expect typical cooking temperatures to be above 500 °F. Cooking temperatures are naturally limited by visible smoke, which happens at 350-500 °F. These temperatures ensure that PTFE-coated cookware has good heat resistance. According to the German Federal Office for Risk Assessment (BfR), even above 680 °F the concentration of decomposition gases resulting from PTFE-coated cookware is so low that there is no health risk for users.

The attach additional information contains additional arguments.

**If needed, attach additional information.**

PFAS Maine Currently Unavoidable Use Cookware\_Groupe SEB - part3.docx - 05/30/2025 10:46 AM

**Comment**

The attach document is the complete answer to question a.

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

Fluoropolymers, unlike non-polymeric PFAS, are essential components in non-stick cookware due to their unique and well-balanced combination of safety, functionality, and durability. Among them, PTFE stands out for its highly stable molecular structure, which is non-mobile, non-bio accumulative, and incapable of crossing the gastrointestinal barrier or entering human cells. When ingested, it passes through the body unchanged. These properties make PTFE safe for use in food contact materials, with no identified risks to human health.

Beyond safety, fluoropolymers offer exceptional performance characteristics, such as inherent non-stick behavior, resistance to chemicals, abrasion, heat, and corrosion. These features ensure the long-term effectiveness of cookware and support healthier cooking practices by reducing the need for added fats and enabling easier cleaning. Their role is not incidental, as fluoropolymers are indispensable for achieving reliable, high-quality, and health-conscious cookware, offering a level of convenience and longevity unmatched by current alternatives.

No material offers the characteristic as fluoropolymer, even not ceramic, in terms of durability, non-stick performance, and abrasion resistance, ultimately offering a longer product lifespan. Current ceramic technologies have yet to match this level of reliability. Studies such as Rossi et al. from 2022 attribute fluoropolymers' superior performance to the strength of the carbon-fluorine (C-F) bond, which provides better self-lubrication and higher resistance to chemical, thermal, and mechanical degradation.

Ceramic coatings rely on surface-functionalized layers that degrade relatively quickly with use, leading to faster wear, reduced performance, and shorter product life cycles (refer to point b and d of section 5), leading to higher costs (refer to point d of section 5) and greater environmental impact, both due to increased material consumption and waste.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Fluoropolymers possess a distinct chemical structure providing the following characteristics:

- a wide range of highly valuable properties, including chemical, biological, and thermal stability, resistance to heat and chemicals, unique dielectric behavior, and exceptional durability (Korzeniowski et al., 2022)
- irreplaceable in many industrial and consumer contexts, as no alternative material currently replicates their performance across such a broad spectrum of conditions (Henry et al., 2018). Their role is particularly critical in high-temperature and chemically aggressive environments, where few other materials can meet system performance requirements (Huber et al., 2019)

Among fluoropolymers, PTFE is the most widely used and generally regarded as superior in terms of performance and versatility:

- extensive regulatory testing and validation for use in food contact and medical applications. It complies with standards set by authorities including the US FDA, EU food safety regulators, Korea MFDS, Japan PMDA, and others, and has passed ISO 10993 biocompatibility assessments as well as preclinical animal testing
- flexibility and mechanical resilience ensure long-lasting performance, even with frequent use and exposure to varying cooking conditions
- chemical inertness and high thermal stability remaining non-reactive and does not degrade at typical cooking temperatures
- smooth surface and low coefficient of friction enable exceptional non-stick functionality, reducing or eliminating the need for added oils and fats and simplifying cleanup, contributing to healthier cooking practices and enhanced user convenience
- extremely low levels of residual monomers, oligomers, and low molecular weight leachables in high-quality PTFE coatings ensure compliance with stringent safety standards, minimizing any risk of contamination during food preparation, see documents in scientific literature, including Ebnesajjad (2011), Olabisi and Adewale (2015), and Henry et al. (2018)

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
------	----------

**5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

[REDACTED]

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

The non-stick durability and overall performance of ceramic-coated cookware remain inferior to those of fluoropolymer coatings thus fail to meet the necessary criteria:

1. A study conducted by Rossi et al, highlights that the Carbon-Fluorine (C-F) bond present in fluoropolymers is key to their superior non-stick and self-lubricating properties, as well as their resistance to both chemicals and high-temperatures - qualities that sol-gel ceramic coatings do not match (Rossi et al., 2022).
2. The same study also identified long-term reliability under regular use and mechanical wear as major limitations of sol-gel based non-stick coatings. Unlike fluoropolymers coatings, which possess inherent non-stick properties, ceramic coatings are not intrinsically non-stick, relying only on the action of the functionalized groups of the topcoat, which can be easily removed by everyday usage. Intended to be used everyday day, ceramic coatings are more vulnerable to abrasion, degradation, and performance over time.
3. As Rossi et al. concluded, Sol-gel coatings, despite being proposed as valid alternatives to fluoropolymer ones, do not achieve the same quality standards in terms of releasing properties, being in addition much more sensible to degradation and loss in performances. (Rossi et al., 2022)
4. Finally, consumer studies comparing ceramic and fluoropolymer non-stick cookware reveal that ceramic-coated cookware tend to wear out more quickly, leading to more frequent replacements. This reduced lifespan not only drives up long-term costs for consumers but may also result in a greater environmental impact (Palermo, A., 2020).

Specific additional and confidential information related to durability is available in the attached supporting documentation.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

[REDACTED]

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

[REDACTED]

[REDACTED]

[REDACTED]

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Siloxane monomers serve as critical precursors in silicone polymers production, which are extensively used across numerous industries, including in the production of so-called ceramic coatings for food contact applications. Although the manufacturing of these monomers and the development (formulation) of silicone-based polymers are global, growing concerns have brought siloxanes under increasing regulatory scrutiny.

Considering both the inherent performance shortcomings of ceramic-coated non-stick cookware, and the tightening regulatory environment surrounding siloxane monomers required for embedding silicone oils in ceramic coatings, these alternatives do not represent a workable replacement for fluoropolymer-based non-stick cookware.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

This section provides an overview of the manufacturing methods used in the production of non-stick cookware.

According to the Fluoropolymers Product Group (FPG), a Europe-based association of global fluoropolymer producers, manufacturers have adopted advanced recovery technologies during production to significantly minimize the presence of residual primary non-polymeric PFAS. These technologies are complemented by stringent environmental and safety rules during the coating formulation phase, ensuring emissions from fluoropolymer-based dispersions are controlled. This approach supports the fluoropolymers manufacturers commitment to achieve the Average Emission Factors of non-polymeric PFAS residues from polymerization aid technology used in the fluoropolymer manufacturing process of 0.003% to air and 0.0006% to water by 2030 (FPG Manufacturing Programme, 2023).

In addition, non-polymeric PFAS are not intentionally added during the manufacturing of finished articles. Any remaining fluorinated polymerization aids are present only in trace residues. According to supplier disclosures, actual dispersions contain less than 1 ppm of fluorinated surfactants levels that fall below the detection capabilities of current analytical methods. Manufacturers also implement robust environmental controls to manage the limited potential emission points related to these substances or fluoropolymer dust. These include the use of fully enclosed processing chambers, high-efficiency filtration systems, and specialized capture-and-treatment technologies. Collectively, these measures ensure that emissions to air, water, and waste streams remain well below applicable regulatory limits.

Additional information is available in the attached supporting documentation.

**Attach supporting documentation if necessary,**

[PFAS Maine Currently Unavoidable Use Cookware\\_Groupe SEB - part5.docx - 05/30/2025 10:46 AM](#)

**Comment**

Information related to question a3, c and is confidential.

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

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**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

The only State where a law currently is banning the sale and distribution of non-stick small kitchen appliances, is Minnesota.

It has to be emphasized that a several States have exempted or are considering exempting non-stick fluoropolymers coatings:

- Delaware and West Virginia do not regulate fluoropolymers in their PFAS laws
- New Mexico enacted some weeks ago law HB 212 exempting products with fluoropolymer coating as non-stick small kitchen appliances
- Illinois is finalizing HB 2516 which bans PFAS with an exemption for non-stick small kitchen appliances
- Ohio is considering HB 272 which bans PFAS with an exemption for fluoropolymers
- California is currently debating SB 682 which exempts products with a fluoropolymer-based coating

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

---

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
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**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

[REDACTED]

[REDACTED]

[REDACTED]

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

---

**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

PFAS used in cookware are recognized by authorities as food compliant materials. PFAS used in cookware are fluoropolymers:

- FDA: Code of Federal Regulations, Title 21, Section 177.1550 (CFR - Title 21, FDA).
- European Union: Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

Fluoropolymers used in cookware are acknowledged by regulatory authorities and numerous organizations as posing no harm to human health:

- German Federal Institute for Risk Assessment (BfR BAuA): ♦ The BfR has no data which would indicate that, under normal usage conditions (no overheating), any PTFE-coated cookware, ovenware or frying pans currently available on the market transfer fluorinated chemicals to food in quantities suitable for endangering human health. ♦ Selected questions and answers on cookware, ovenware and frying pans with a non-stick coating made of PTFE (FAQ, 18 December 2018).
- European Food Safety Agency (EFSA): FSA ♦s Scientific Committee noted that the risk assessment of polymers used in food additives ♦ those that can be ingested ♦ must consider molecular weight (i.e., size). EFSA states that polymers are unlikely to be absorbed through the gastrointestinal barrier and are therefore not considered a health hazard (EFSA Journal, 2016).

Therefore, PFAS used in cookware are fluoropolymers. They do not impact human health and are recognized by authorities as Food Contact Compliant.

Additional information is available the attached document.

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

Consumers using non-stick cookware are exposed to negligible amount of PFAS through the food being prepared:

- FDA: ♦ The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of cookware. Studies show negligible amounts of PFAS in this coating can migrate to food (♦ Authorized Uses of PFAS in Food Contact Applications ♦, FDA).
- EFSA confirmed that fluoropolymers in contact with food are not a major source of PFAS exposure. While some migration to food is possible, the quantity would be minimal ♦ on the order of micrograms per kilogram (♦ g/kg) ♦ a level significantly lower than the background levels of PFAS typically found in food, which remain the primary source of exposure (Risk to Human Health Related to the Presence of Perfluoroalkyl Substances in Food, 9 July 2020).
- Environmental Working Group (EWG) ♦ But even though it ♦s always been the poster child for PFAS exposure, this cookware is not anticipated to be a major source of exposure. ♦ (Top 3 Ways to Reduce PFAS Exposure, EWG).

During normal use, part of the coating may peel off. Those detached parts are made of fluoropolymers which are inert. This does not pose a health risk:

- German Federal Institute for Risk Assessment (BfR BAuA) : ♦ It is still safe to health if minute particles are released from scratched coatings and swallowed when eating. As PTFE is inert, these particles are not digested and are excreted from the body unchanged (FAQ, 18 December 2018).

Therefore, human using non-stick cookware are exposed to a negligible amount of PFAS. It does not impact human health.

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

PFAS used in non-stick cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact:

- Interstate Technology & Regulatory Council (ITRC), September 2023: ♦ Stable, insoluble fluoropolymer such as PTFE may pose little environmental, ecological, or health risk once it is in a product. ♦ (Full PFAS Guidance, December 2023).

Therefore, PFAS used in non-stick cookware are fluoropolymers, recognized as stable, chemically inert materials and therefore they pose negligible environmental impact.

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

During manufacturing phase, manufacturers of fluoropolymers are committed to apply best available techniques to limit emissions:

- Fluoropolymer Professional Association (FPG) has communicated in March 2025 about their achievements and continued efforts FPG. (Statement on the Manufacturing Programme 2025 - Plastics Europe including major US manufacturers).

During consumer use phase, the release of PFAS in the environment is negligible:

- FDA: ♦The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of the small kitchen appliance. Studies show negligible amounts of PFAS in this coating can migrate to food (♦Authorized Uses of PFAS in Food Contact Applications♦, FDA).
- PFAS used in cookware are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact: see Interstate Technology & Regulatory Council (ITRC), September 2023: ♦stable, insoluble fluoropolymer such as PTFE may pose little environmental ecological or health risk once it is in a product (Full PFAS Guidance, December 2023).

Additional information is available the attached document.

**If needed, attach additional information.**

[PFAS Maine Currently Unavoidable Use Cookware\\_Groupe SEB - part8.docx - 05/30/2025 10:48 AM](#)  
**Comment**  
 NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

In the United States, approximately 47% of cookware is recycled. This relatively lower rate is partly due to a higher level of donations, around 15%, compared to other countries surveyed.

A 2024 study conducted by a cookware manufacturer found that about two-thirds of consumers prefer recycling options for cookware, such as waste disposal centers, domestic recycling, or in-store drop-off points.

In the United States, this preference stands at 47% whereas it reaches 73% in France and 80% in Sweden. In other cases, cookware are simply discarded with regular household waste.

**Additional Supportive Attachments**

[PFAS Maine Currently Unavoidable Use Cookware\\_Groupe SEB - part9.docx - 05/30/2025 10:45 AM](#)  
**Comment**  
 NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Landfill

Other: See additional supportive attachment

**c. The recycling rate of the product.**

80

**10. This section relates to Confidential Business Information.**

**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

Section Number	Question Letter
5	a
5	c
5	d
7	c

**Attachments**

<b>Date</b>	<b>Attachment Name</b>	<b>Context</b>	<b>Confidential?</b>	<b>User</b>
5/30/2025 10:48 AM	PFAS Maine Currently Unavoidable Use Cookware_Groupe SEB - part8.docx	Attachment	No	Yohann Boileau
5/30/2025 10:46 AM	PFAS Maine Currently Unavoidable Use Cookware_Groupe SEB - part5.docx	Attachment	No	Yohann Boileau
5/30/2025 10:46 AM	PFAS Maine Currently Unavoidable Use Cookware_Groupe SEB - part3.docx	Attachment	No	Yohann Boileau
5/30/2025 10:45 AM	PFAS Maine Currently Unavoidable Use Cookware_Groupe SEB - part9.docx	Attachment	No	Yohann Boileau

## Status History

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	<b>User</b>	<b>Processing Status</b>
5/14/2025 5:19:44 AM	Yohann Boileau	Draft
5/30/2025 10:49:28 AM	Yohann Boileau	Submitted
5/30/2025 10:49:32 AM	Yohann Boileau	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZH6A-HQE84, version 1)

## Details

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**Submission ID** HQC-ZH6A-HQE84

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Yohann              Boileau

**Title**

Regulatory affairs Senior Director

**Organization Name**

Groupe SEB

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#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

#### 2a. Product Category

**Product Category Name**

Cookware product

**The descriptive name of the product.**

Small kitchen appliances with non-stick fluoropolymer-coated surfaces.

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

This proposal is related to small kitchen appliances with non-stick fluoropolymer-coated surfaces that are in direct contact with food.

This product category encompasses several subcategories as:

- Food preparation appliances i.e. kitchen machines, blenders, food processors and the like;
- Cooking appliances i.e., portable oven, rice cooker, portable barbeques, plancha, toaster and grills and the like;
- Beverage appliances i.e. espresso makers, coffee makers and the like.

These appliances are hand-held or used on bench. When not in use they can be stored in kitchen cabinet or drawer. Therefore, they must be compact, light and/or portable. They are aimed to process, cook and/or store food.

Some of these products are to be considered as **cookware** according to the PFAS Maine's regulation related to PFAS.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
72020100 small cooking/heating appliances

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
----------

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

335210-Small Electrical Appliance Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

---

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Fluoropolymer-coated small kitchen appliances offer a unique combination of properties that not only make it a preferred choice for consumers but also contribute significantly to health safety and the smooth functioning of society.

Some key functions of such substances in a non-stick small kitchen appliances application:

- Non-stick: an exceptionally strong carbon-fluorine (C-F) bond, the strongest in organic chemistry, PTFE exhibits outstanding self-lubricating and non-stick properties, along with excellent chemical and thermal resistance (cf. Rossi et al., 2022). As a result, the fluoropolymer PTFE is inherently non-stick, offering low or no fat use during cooking, ensuring predictable results by preserving food texture and preventing burning, and allowing for easy cleaning with reduced detergent and water use.
- Abrasion resistance: fluoropolymer-coatings have high abrasion resistance, due to the combination of the coating's ductility, adhesion, and low friction.
- Heat resistance: Pyrolysis of food starts at 350 °F, while PTFE is known to start to deteriorate at an extremely slow rate above 500 °F. Above 680 °F, the degradation of PTFE starts to be measurable. It is unreasonable to expect typical cooking temperatures to be above 500 °F. Cooking temperatures are naturally limited by visible smoke, which happens at 350-500 °F. These temperatures ensure that PTFE-coated cookware has good heat resistance. According to the German Federal Office for Risk Assessment (BfR), even above 680 °F the concentration of decomposition gases resulting from PTFE-coated cookware is so low that there is no health risk for users.

A complete answer is provided in the attached additional information.

**If needed, attach additional information.**

PFAS Maine Currently Unavoidable Use kitchen appliances - part3.docx - 05/30/2025 11:10 AM

**Comment**

Complete answer to question 3a

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

Fluoropolymers, unlike non-polymeric PFAS, are essential components in non-stick small kitchen appliances due to their unique and well-balanced combination of safety, functionality, and durability. Among them, PTFE stands out for its highly stable molecular structure, which is non-mobile, non-bio accumulative, and incapable of crossing the gastrointestinal barrier or entering human cells. When ingested, it passes through the body unchanged. These properties make PTFE safe for use in food contact materials, with no identified risks to human health

Beyond safety, fluoropolymers offer exceptional performance characteristics, such as inherent non-stick behavior, resistance to chemicals, abrasion, heat, and corrosion. These features ensure the long-term effectiveness of small kitchen appliances and support healthier cooking practices by reducing the need for added fats and enabling easier cleaning. Their role is not incidental, as fluoropolymers are indispensable for achieving reliable, high-quality, and health-conscious kitchen appliances, offering a level of convenience and longevity unmatched by current alternatives

No material offers the characteristics of fluoropolymer, even not ceramic, in terms of durability, non-stick performance, and abrasion resistance, ultimately offering a longer product lifespan. Current ceramic technologies have yet to match this level of reliability. Studies such as Rossi et al. from 2022 attribute fluoropolymers superior performance to the strength of the carbon-fluorine (C-F) bond, which provides better self-lubrication and higher resistance to chemical, thermal, and mechanical degradation

Ceramic coatings rely on surface-functionalized layers that degrade relatively quickly with use, leading to faster wear, reduced performance, and shorter product life cycles (refer to point b and d of section 5), leading to higher costs (see point d of section 5) and greater environmental impact, both due to increased material consumption and waste

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Fluoropolymers possess a distinct chemical structure providing the following characteristics:

- a wide range of highly valuable properties, including chemical, biological, and thermal stability, resistance to heat and chemicals, unique dielectric behavior, and exceptional durability (Korzeniowski et al., 2022)
- irreplaceable in many industrial and consumer contexts, as no alternative material currently replicates their performance across such a broad spectrum of conditions (Henry et al., 2018). Their role is particularly critical in high-temperature and chemically aggressive environments, where few other materials can meet system performance requirements (Huber et al., 2019)

Among fluoropolymers, PTFE is the most widely used and generally regarded as superior in terms of performance and versatility:

- extensive regulatory testing and validation for use in food contact and medical applications. It complies with standards set by authorities including the US FDA, EU food safety regulators, Korea MFDS, Japan PMDA, and others, and has passed ISO 10993 biocompatibility assessments as well as preclinical animal testing
- flexibility and mechanical resilience ensure long-lasting performance, even with frequent use and exposure to varying cooking conditions
- chemical inertness and high thermal stability remaining non-reactive and does not degrade at typical cooking temperatures
- smooth surface and low coefficient of friction enable exceptional non-stick functionality, reducing or eliminating the need for added oils and fats and simplifying cleanup, contributing to healthier cooking practices and enhanced user convenience
- extremely low levels of residual monomers, oligomers, and low molecular weight leachables in high-quality PTFE coatings ensure compliance with stringent safety standards, minimizing any risk of contamination during food preparation, see documents in scientific literature, including Ebnesajjad (2011), Olabisi and Adewale (2015), and Henry et al. (2018)

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
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**5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

Materials such as cast iron, stainless steel, and raw aluminum do not possess natural non-stick capabilities. While they may be valued for their ability to retain heat and withstand wear, these materials generally need to be seasoned regularly or used with oil to reduce food adhesion. As a result, they fall short of the convenience and low-maintenance expectations that consumers have. Therefore, these materials are not suitable alternatives for non-stick fluoropolymer-based coatings used in small kitchen appliances.

Regarding more specifically ceramic coatings, they are mistakenly regarded as a suitable substitution for fluoropolymer-based non-stick surfaces used in small kitchen appliances in contact with food. However, extensive research and repeated consumer testing have shown that ceramic alternatives do not measure up, particularly in terms of non-stick durability and overall performance over time. Because of this, ceramic-coated appliances often wear out faster and need to be replaced sooner, which may increase both environmental impact and long-term consumer costs. Further details are provided in point b in section 5.

[REDACTED]

[REDACTED]

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

The non-stick durability and overall performance of non-stick ceramic-coated surfaces in small kitchen appliances remain inferior to those of fluoropolymer coatings thus fail to meet the necessary criteria:

1. A study conducted by Rossi et al, highlights that the Carbon-Fluorine (C-F) bond present in fluoropolymers is key to their superior non-stick and self-lubricating properties, as well as their resistance to both chemicals and high-temperatures - qualities that sol-gel ceramic coatings do not match (Rossi et al., 2022).
2. The same study also identified long-term reliability under regular use and mechanical wear as major limitations of sol-gel based non-stick coatings. Unlike fluoropolymers coatings, which possess inherent non-stick properties, ceramic coatings are not intrinsically non-stick, relying only on the action of the functionalized groups of the topcoat, which can be easily removed by everyday usage. Intended to be used everyday day, ceramic coatings are more vulnerable to abrasion, degradation, and performance over time.
3. As Rossi et al. concluded, Sol-gel coatings, despite being proposed as valid alternatives to fluoropolymer ones, do not achieve the same quality standards in terms of releasing properties, being in addition much more sensible to degradation and loss in performances. (Rossi et al., 2022)
4. Finally, consumer studies comparing ceramic and fluoropolymer non-stick surfaces used in small kitchen appliances (in contact with food) reveal that ceramic-coated surfaces tend to wear out more quickly, leading to more frequent replacements (of the part of the product). This reduced lifespan not only drives up long-term costs for consumers but may also result in a greater environmental impact (Palermo, A., 2020).

Specific additional and confidential information on durability is available in the attached supporting documentation.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

[REDACTED]

[REDACTED]

[REDACTED]

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Siloxane monomers serve as critical precursors in silicone polymers production, which are extensively used across numerous industries, including in the production of so-called ceramic coatings for food contact applications, including in small kitchen appliances. Although the manufacturing of these monomers and the development (formulation) of silicone-based polymers are global, growing concerns have brought siloxanes under increasing regulatory scrutiny.

Considering both the inherent performance shortcomings of ceramic-coating for non-stick surfaces in small kitchen appliances, and the tightening regulatory environment surrounding siloxane monomers required for embedding silicone oils in ceramic coatings, these alternatives do not represent a workable replacement for fluoropolymer-based non-stick components in small kitchen appliances.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

This section provides an overview of the manufacturing methods of small kitchen appliances with non-stick fluoropolymer-coated surfaces.

According to the Fluoropolymers Product Group (FPG), a Europe-based association of global fluoropolymer producers, manufacturers have adopted advanced recovery technologies during production to significantly minimize the presence of residual primary non-polymeric PFAS. These technologies are complemented by stringent environmental and safety rules during the coating formulation phase, ensuring emissions from fluoropolymer-based dispersions are controlled. This approach supports the fluoropolymers manufacturers commitment to achieve the Average Emission Factors of non-polymeric PFAS residues from polymerization aid technology used in the fluoropolymer manufacturing process of 0.003% to air and 0.0006% to water by 2030 (FPG Manufacturing Programme, 2023).

In addition, non-polymeric PFAS are not intentionally added during the manufacturing of finished articles. Any remaining fluorinated polymerization aids are present only in trace residues. According to supplier disclosures, actual dispersions contain less than 1 ppm of fluorinated surfactants levels that fall below the detection capabilities of current analytical methods. Manufacturers also implement robust environmental controls to manage the limited potential emission points related to these substances or fluoropolymer dust. These include the use of fully enclosed processing chambers, high-efficiency filtration systems, and specialized capture-and-treatment technologies. Collectively, these measures ensure that emissions to air, water, and waste streams remain well below applicable regulatory limits.

Additional information is available in the attached supporting documentation.

**Attach supporting documentation if necessary,**

[PFAS Maine Currently Unavoidable Use kitchen appliances - part5.docx - 05/30/2025 11:15 AM](#)

**Comment**

Confidential

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

The only State where a law currently is banning the sale and distribution of non-stick small kitchen appliances, is Minnesota.

It has to be emphasized that a several States have exempted or are considering exempting non-stick fluoropolymers coatings:

- Delaware and West Virginia do not regulate fluoropolymers in their PFAS laws
- New Mexico enacted some weeks ago law HB 212 exempting products with fluoropolymer coating as non-stick small kitchen appliances
- Illinois is finalizing HB 2516 which bans PFAS with an exemption for non-stick small kitchen appliances
- Ohio is considering HB 272 which bans PFAS with an exemption for fluoropolymers
- California is currently debating SB 682 which exempts products with a fluoropolymer-based coating

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
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**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

Products available in compliance with the prohibition are not reasonably available alternatives for small kitchen appliances with non-stick fluoropolymer-coated surfaces. We can distinguish two categories of products, products with ceramic coating and products with traditional materials as glass, metals cast irons and the like. Both are not workable alternatives.

Ceramic coating:

Non-stick ceramic-coated surfaces which are wrongly considered as a workable alternative last two time less that non-stick fluoropolymer-coated surfaces. This is due to that the non-stick property comes from the addition of oils in the ceramic coating. Use after use, these oils will no longer be present in the ceramic resulting in a loss of non-stick properties. There are negative impacts for Maine consumers:

- surfaces with ceramics coating will be discarded and replaced 2 times more frequently (see question 5b)
- from a cost perspective, users will have to spend more money
- more waste will be generated

In addition, the oils used in ceramic coatings notably the impacts on a long-term, have not been studied unlike fluoropolymer especially PTFE, that have been studied for decades. It would make no sense to substitute fluoropolymer coatings that are safe by ceramic coatings whose effects are not known at the same detailed level. Replacing a mature technology by a technology that has not been subject to the same scrutiny is likely to lead to a regrettable substitution. Chemical public policy shall be based on robust and comparable set of data.

Traditional materials:

Materials such as metals, cast-iron, glass do not have non-stick properties. To avoid food sticking on the cooking surfaces, the addition of fatty food is needed such as oil butter. It has been demonstrated that the use of fatty food when cooking and preparing food has negative impact on health. Heating oil or butter leads to create free radicals which have adverse effects on human health.

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

## 8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.

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### a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.

PFAS used in small kitchen appliances are recognized by authorities as food compliant materials. PFAS used in small kitchen appliances with non-stick surfaces are fluoropolymers:

- FDA: Code of Federal Regulations, Title 21, Section 177.1550 (CFR - Title 21, FDA).
- European Union: Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

Fluoropolymers used in small kitchen appliances with non-stick surfaces are acknowledged by regulatory authorities and numerous organizations as posing no harm to human health:

- German Federal Institute for Risk Assessment (BfR BAuA): The BfR has no data which would indicate that, under normal usage conditions (no overheating), any PTFE-coated small kitchen appliances currently available on the market transfer fluorinated chemicals to food in quantities suitable for endangering human health (FAQ, December 2018).
- European Food Safety Agency (EFSA): noted that the risk assessment of polymers used in food additives those that can be ingested must consider molecular weight (i.e., size). EFSA states that polymers are unlikely to be absorbed through the gastrointestinal barrier and are therefore not considered a health hazard (EFSA Journal, 2016).

Therefore, PFAS used in small kitchen appliances with non-stick coated surfaces are fluoropolymers. They do not impact human health and are recognized by authorities as Food Contact Compliant.

Complete answer available in the attached additional information.

### b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.

Consumers using small kitchen appliances with non-stick fluoropolymer-coated surfaces are exposed to negligible amount of PFAS through the food being prepared:

- FDA: The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of the small kitchen appliance. Studies show negligible amounts of PFAS in this coating can migrate to food (Authorized Uses of PFAS in Food Contact Applications, FDA)
- EFSA confirmed that fluoropolymers in contact with food are not a major source of PFAS exposure. While some migration to food is possible, the quantity would be minimal on the order of micrograms per kilogram (g/kg) a level significantly lower than the background levels of PFAS typically found in food, which remain the primary source of exposure (Risk to Human Health Related to the Presence of Perfluoroalkyl Substances in Food, 9 July 2020).
- Environmental Working Group (EWG), But even though it's always been the poster child for PFAS exposure, this small kitchen appliance is not anticipated to be a major source of exposure. (Top 3 Ways to Reduce PFAS Exposure, EWG).

During normal use, part of the coating may peel off. Those detached parts are made of fluoropolymers which are inert. This does not pose a health risk:

- German Federal Institute for Risk Assessment (BfR BAuA) : It is still safe to health if minute particles are released from scratched coatings and swallowed when eating. As PTFE is inert, these particles are not digested and are excreted from the body unchanged (FAQ, 18 December 2018).

Therefore, human using small kitchen appliances with non-stick fluoropolymer-coated surfaces are exposed to a negligible amount of PFAS. It does not impact human health.

### c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.

PFAS used in small kitchen appliances with non-stick surfaces are fluoropolymers. They are recognized as stable, chemically inert materials. Therefore, they pose a negligible environmental impact:

- Interstate Technology & Regulatory Council (ITRC), September 2023: Stable, insoluble fluoropolymer such as PTFE may pose little environmental, ecological, or health risk once it is in a product. (Full PFAS Guidance, December 2023).

Therefore, PFAS used in small kitchen appliances with non-stick surfaces are fluoropolymers, recognized as stable, chemically inert materials and therefore they pose negligible environmental impact.

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

During manufacturing phase, manufacturers of fluoropolymers coating are committed to apply best available techniques to limit emissions:

- Fluoropolymer Professional Association (FPG) haq communicated in March 2025 about their achievements and continued efforts. (Statement on the Manufacturing Programme 2025 - Plastics Europe including major US manufacturers).

During consumer use phase, the release of PFAS in the environment is negligible:

- FDA: ♦The manufacturing process vaporizes off virtually all the smaller (i.e., migratory) PFAS molecules. The result is a highly polymerized coating bound to the non-stick surface of the small kitchen appliance. Studies show negligible amounts of PFAS in this coating can migrate to food (♦Authorized Uses of PFAS in Food Contact Applications♦, FDA)
- PFAS used in small kitchen appliances with non-stick surfaces are fluoropolymers are recognized as stable, chemically inert materials and pose a negligible environmental impact: see Interstate Technology & Regulatory Council (ITRC), September 2023: ♦stable, insoluble fluoropolymer such as PTFE may pose little environmental ecological or health risk once it is in a product (Full PFAS Guidance, December 2023).

More detailed information is available in Section 9.

Therefore, pathways for environmental release of PFAS used in small kitchen appliances with non-stick fluoropolymer-coated surfaces are negligible and when occurring are controlled and minimized using best available techniques prescribed by authorities.

Complete answer available in the attached additional information.

**If needed, attach additional information.**

[PFAS Maine Currently Unavoidable Use kitchen appliances - part8.docx - 05/30/2025 11:27 AM](#)  
**Comment**  
NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

At the end of their lifecycle, small domestic appliances (SDAs), including kitchen appliances, can follow various disposal routes, largely depending on consumer habits, the presence of product stewardship initiatives, and local regulatory frameworks. Some examples:

- ♦ Some small domestic appliances (SDAs) are discarded in landfills because consumers are either unaware of proper recycling methods or lack access to suitable recycling facilities. The most common scenario occurs when consumers dispose of SDAs along with their regular household waste.
- ♦ Consumers have the option to take their appliances to designated recycling centers, where the products are dismantled, hazardous materials are safely managed, and valuable resources such as metals are recovered. This recycling process plays an important role in minimizing environmental impact.
- ♦ Certain manufacturers provide take-back schemes that enable consumers to return their used appliances, ensuring these items are recycled responsibly.

**Additional Supportive Attachments**

[PFAS Maine Currently Unavoidable Use kitchen appliances - part9.docx - 05/30/2025 11:28 AM](#)  
**Comment**  
NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Landfill

Other: See additional supportive attachment of question a

**c. The recycling rate of the product.**

80

**10. This section relates to Confidential Business Information.**

**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

Section Number	Question Letter
5	a (last paragraph)

Section Number	Question Letter
5	c
5	d
7	c

## Attachments

Date	Attachment Name	Context	Confidential?	User
5/30/2025 11:28 AM	PFAS Maine Currently Unavoidable Use kitchen appliances - part9.docx	Attachment	No	Yohann Boileau
5/30/2025 11:27 AM	PFAS Maine Currently Unavoidable Use kitchen appliances - part8.docx	Attachment	No	Yohann Boileau
5/30/2025 11:15 AM	PFAS Maine Currently Unavoidable Use kitchen appliances - part5.docx	Attachment	No	Yohann Boileau
5/30/2025 11:10 AM	PFAS Maine Currently Unavoidable Use kitchen appliances - part3.docx	Attachment	No	Yohann Boileau

## Status History

	User	Processing Status
5/30/2025 10:52:22 AM	Yohann Boileau	Draft
5/30/2025 11:29:27 AM	Yohann Boileau	Submitted
5/30/2025 11:29:32 AM	Yohann Boileau	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-XVWW-DVJ0F, version 1)

## Details

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**Submission ID** HQC-XVWW-DVJ0F

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

First Name	Last Name
John	Keane

**Title**

NONE PROVIDED

**Organization Name**

Association of Home Appliance Manufacturers

Phone Type	Number	Extension
Business	202-872-5955	328

**Email**

jkeane@aham.org

**Mailing Address**

1111 19th St NW #1150  
Washington, DC 20036

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

---

#### 2a. Product Category

**Product Category Name**

Cookware product

**The descriptive name of the product.**

Coffee Makers

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

Cooking appliance that is used to brew coffee; average height of a standard coffee maker is around 12 to 15 inches but can vary depending on the specific model.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
8516.71.00

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

335210-Small Electrical Appliance Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

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Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Coffee makers play a central role in American homes and businesses. Coffee is consumed daily by millions of Americans every day and coffee makers provide households and workplaces a quick and easy way to brew coffee for multiple people. Often, owning a coffee maker can be more cost-effective than purchasing coffee from outside sources as consumers can choose the type of coffee, quantity, and minimize waste.

Several states have enacted prohibitions of intentionally added PFAS in cookware, but Maine is the first state to include coffee makers. With Maine being the first state, manufacturers are trying to adapt, but this ban could cause a disruption to Maine's supply of coffee makers. As coffee maker manufacturers learned of the inclusion of food contact surfaces inside coffee and espresso makers April into May 2025 through the adoption of Chapter 90-Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances with subsequent meetings and guidance, manufacturers are worried that many coffee makers would not be available to be sold by January 2026. The issue is that the selection, testing, and validation of alternative materials takes years. This quick ban could lead to a significant disruption in the availability of coffee makers and could affect the daily functions of Maine consumers.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

---

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

CAS: 9002-84-0, Ethene, tetrafluoro-, homopolymer (PTFE)

CAS: 25067-11-2, 1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with tetrafluoroethene (FEP)

CAS: 24937-79-9, Ethene, 1,1-difluoro-, homopolymer (Poly(vinylidene fluoride)) (PVDF)

CAS: 9011-17-0, 1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene (FKM)

These PFAS fluoropolymers are used in coffee makers parts like tubing, gaskets, solenoid valves and vibrating pumps and are essential because of their exceptional properties such as chemical stability, resistance to high pressure, durability and maintenance through higher temperatures, & long-lasting non-stick and self-lubricating properties.

The Food and Drug Administration has authorized fluoropolymers for use in food contact applications. Just in January 2025, the FDA confirmed that fluoropolymers intended for use in the manufacture of coated cookware and food contact seals are approved and do not pose a safety risk, as they are made of polymerized molecules.

<https://www.fda.gov/food/process-contaminants-food/authorized-uses-pfas-food-contact-applications>

<https://www.fda.gov/food/process-contaminants-food/questions-and-answers-pfas-food>

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

PTFE in piping/tubing is often used in coffee machines to transfer hot water, steam, and coffee due to their resistance to high pressure, high temperature, and chemical stability.

PTFE coating on components like pumps and valves used for long-lasting non-stick and self-lubricating properties.

FEP and PVDF in piping and connectors used for resistance to high pressure, high temperature, and chemical stability.

FKM in gaskets and O-rings are used for chemical stability, long durability, resistance to high pressure and high temperature. This PFAS is often used for electrical insulation.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

## **5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

The PFAS fluoropolymers mentioned may potentially be replaced by alternative materials such as reinforced silicon, non-PFAS polymers and ceramics which do not offer the same combination of properties such as resistance to high pressure and temperature and resistance to friction. For example, silicone tubing has a tendency to dry out and become brittle over time, especially subjected to heat for prolonged periods. This could create potential leakage and would potentially require the coffee maker to be replaced.

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

Decreased durability could lead to coffee makers breaking down and increased waste

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

Assessing alternatives have not been sought as this is the first state to enact a ban impacting coffee makers.

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

The alternatives mentioned have not yet been fully tested so the true cost is unclear. The time required to identify, source, test, and validate alternative materials can take several years and could be costly for manufacturers.

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

N/A

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

The manufacturing process will likely remain the same, but the materials used for particular components purchased from external suppliers will change. The reason for this is that the fluoropolymers used are not additives or additional chemical elements used in the process; rather, they are used in the appliances as a base material for making components or coatings with specific technical features. Therefore, manufacturers cannot eliminate any PFAS fluoropolymers through a change in the manufacturing process alone, as full design and supply chain changes would be required.

**Attach supporting documentation if necessary,**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

The FDA regulates substances that come into contact with food, including food packaging and processing materials. This includes tubing used in espresso machines, coffee makers, and other food-related equipment.

Food contact parts and materials of coffee machines shall comply with: FDA - CFR21 Code of Federal Regulations, Title 21, Food & Drug, Vol.3, Chapter I, Parts 170-199 as well as applicable raw materials restrictions and registration managed by FDA (e.g. Gras, FCN - Food Contact Notice, FCS - Food Contact Substances).

Relative to safety standards, domestic coffee machines also comply with UL 1082 where components shall be resistant to thermal degradation at maximum temperature to which it is exposed during normal use of the appliance.

At the state level, in 2023, Minnesota enacted Amara's Law which included a 2025 ban on 11 product categories including cookware. The products listed in the law relative to cookware are the same under Maine's law: "Cookware" means durable houseware items used to prepare, dispense, or store food, foodstuffs, or beverages. Cookware includes but is not limited to pots, pans, skillets, grills, baking sheets, baking molds, trays, bowls, and cooking utensils.

However, in subsequent meetings on guidance, the Minnesota Pollution Control Agency made clear an electric coffee machine is not included because it does not match well with any of the listed items.

<https://www.pca.state.mn.us/sites/default/files/20240725-presentation-pfas-prohibitions.pdf>

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
Cookware product	Coffee Makers	NONE PROVIDED	NONE PROVIDED		

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.

NONE PROVIDED

Attach additional information.

NONE PROVIDED  
Comment  
NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.

NONE PROVIDED

b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.

NONE PROVIDED

c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.

NONE PROVIDED

d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.

NONE PROVIDED

If needed, attach additional information.

NONE PROVIDED  
Comment  
NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.

Many consumers have a coffee maker that has stopped working. The challenge with disposing of old coffee machines is that it is not simple as throwing them in the trash. Most coffee makers are made of recyclable materials like plastic, metal, and glass, but they are considered e-waste and require special handling. Many localities may have e-waste programs in place.

Recycling rate below is challenging as there are parts of the coffee maker that are disposed differently.

Additional Supportive Attachments

NONE PROVIDED  
Comment  
NONE PROVIDED

b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?

Landfill

c. The recycling rate of the product.

5

**10. This section relates to Confidential Business Information.**

1. Please list the section (number) and question (letter) of submission information which contains confidential business information.

Section Number	Question Letter
NONE PROVIDED	NONE PROVIDED

Status History

## Status History

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	User	Processing Status
5/28/2025 8:00:22 AM	John Keane	Draft
5/30/2025 2:50:43 PM	John Keane	Submitted
5/30/2025 2:50:52 PM	John Keane	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZKB4-SGASS, version 2)

## Details

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**Submission ID** HQC-ZKB4-SGASS

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 2)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Leah                Sober

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type**    **Number**        **Extension**

Business        2622602000    3546

**Email**

lmsober@scj.com

**Mailing Address**

1525 HOWE ST

RACINE, WI 53403-2237

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 1. Submitter Information. (2 of 2)

#### Instructions

Provide the contact information for your organization.

### a. Submitter

**First Name      Last Name**

Nicole              Nelson

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type      Number              Extension**

Business              2622602000

**Email**

nlnelson@scj.com

**Mailing Address**

1525 HOWE ST  
RACINE, WI 53403-2237

### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

## 2. Brief description of the type of product to which PFAS is intentionally added.

### 2a. Product Category

**Product Category Name**

Cleaning product

**The descriptive name of the product.**

TruShot 2.0 Refill Package Vent

### b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.

We are submitting this Currently Unavoidable Use (CUU) application out of an abundance of caution, as it is not clear whether the items in question fall within the scope of Maine's PFAS regulations both because of their forms and functions as well as the fact that they may not have been intentionally formulated with PFAS.

Although these products may not have been intentionally formulated with PFAS and may not clearly fall within a regulated product category, we recognize that certain internal components within the delivery system may raise questions under the current regulatory definitions. Accordingly, we are submitting this CUU request provisionally to seek clarification and with reservation of rights to contest the characterizations under Maine's PFAS regulations.

This submission is made in good faith, with the intent to cooperate fully with the Maine Department of Environmental Protection and to support the state's efforts to reduce PFAS exposure.

Inside the valve cup located at the top of the cartridge for the following concentrated products, there is a small valve (approximately 0.014g), and a portion of the membrane details of which are proprietary contains Polytetrafluoroethylene (PTFE) CAS 9002-84-0:

- TruShot 2.0 Restroom Cleaner Refill
- TruShot 2.0 Power Cleaner Degreaser Refill
- TruShot 2.0 Multi-Surface Glass Cleaner Refill
- TruShot 2.0 Restroom Disinfectant Cleaner Refill
- TruShot 2.0 Hospital Disinfectant Cleaner Refill
- TruShot 2.0 Multi-Surface Restroom Disinfectant Cleaner Refill
- TruShot 2.0 Starter Pack

9-oz. concentrate cartridges snap directly into a trigger dispenser and the pre-labeled cartridges. The concentrated product within the cartridge is then diluted with the 10-oz. water reservoir which is connected to the trigger dispenser.

The TruShot 2.0 hard surface chemistries and this patented system simplifies dilution dispensing and replaces wall-mounted or other concentrate dispensing systems.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
3926.90.4510

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

561210-Facilities Support Services  
561720-Janitorial Services

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

---

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

This product ensures consistent and effective cleaning and disinfection, which helps prevent the spread of harmful pathogens in public and private spaces such as hospitals, schools, and workplaces. Their pre-measured, closed system reduces human error in dilution, enhances worker safety, and eliminates the need for bulky wall-mounted systems making sanitation more accessible and reliable across industries.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

---

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

The importance of the vent is that it controls the dilution ratio of concentrated cleaners. This is essential to ensure that the products including those registered as disinfectants with the EPA are appropriately diluted to maintain their efficacy and intended use.

Controlled dilution is also critical to limit potential worker exposure to concentrated cleaners, which often carry a 'Danger' hazard classification that are governed under 29 CFR 1910.1200 - Hazard Communication Standard (HCS).

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

The vent is engineered with a precise airflow rate due to its narrow structure. It is also designed to withstand the chemical compatibility challenges posed by highly corrosive formulations and their associated off gassing. This allows for a delicate and finely tuned mechanical interaction. Additionally, the material is hydrophobic and oleophobic, helping to repel these aggressive substances and maintain performance integrity.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

## 5. Description of reasonably available alternatives for this specific use of PFAS.

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

### a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.

We have tested alternative non-PFAS materials, including Sefar Puretex, but they lack the necessary chemical compatibility. These alternatives also fail to deliver the precise dosing required to meet the dilution specifications of the formulations, as previously described.

### b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.

With alternative membrane materials, chemical incompatibility can compromise material integrity, which in turn affects the airflow rate and overall performance of the system.

With alternative valve designs, excessively high cracking pressures lead to inconsistent dilution ratios, which negatively impact the efficacy of the formulations and potential package failure.

### c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.

Sufficient materials nor a redesign are available.

### d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.

Not currently available.

### e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.

None available

### f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.

As mentioned above, a product redesign is being worked on.

### Attach supporting documentation if necessary,

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

## 6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.

### a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.

We acknowledge that these products may also fall within the scope of Minnesota's PFAS prohibitions. However, we understand that the Minnesota Legislature has provided a temporary exemption through enforcement discretion for electronic and other internal components in this category. The state is actively evaluating how to address this regulatory complexity, and we are monitoring developments closely to ensure continued compliance.

## 7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.

### a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED

**Comment**

NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

---

**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

PFAS are capable of causing a variety of effects including cancer, reproductive effects, immune effects, and other health outcomes. The effects depend on the duration, the route of exposure and the dose which is expected to be minimal in this product as the contact to human is indirect.

1. PMID: 33017053

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

The concentrated formula in this product could contact the breathable membrane during product use resulting in a minimal dermal exposure to consumers. Professional users are however expected to use gloves during cleaning which further limits any potential exposure.

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

Toxicological studies(1) indicated that PTFE meets the criteria suggested by OECD for polymer of low concerns (PLCs). PLCs have insignificant environmental impacts. PTFE has a higher molecular weight and are less likely to pose a hazard than lower molecular weight polymers. It is stable in the environment, not soluble in water and not subject to long-range transport. It is not bioavailable or bio accumulative. It has low molecular weight leachables. Due to their property and low concerns, there is currently no suitable alternatives(2).

1. <https://pubmed.ncbi.nlm.nih.gov/29424474/>

2. <https://product.enhesa.com/826977> (login required)

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

No pathways for direct environmental releases are anticipated from the use of this product. End-of-life disposal to landfill are the main source of environmental exposure.

**If needed, attach additional information.**

NONE PROVIDED

**Comment**

NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

---

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

Empty containers are disposed of as general waste ending up in landfills

**Additional Supportive Attachments**

NONE PROVIDED

**Comment**

NONE PROVIDED

b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?

Landfill

c. The recycling rate of the product.

0

## 10. This section relates to Confidential Business Information.

---

1. Please list the section (number) and question (letter) of submission information which contains confidential business information.

Section Number	Question Letter
NONE PROVIDED	NONE PROVIDED

## Status History

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	User	Processing Status
6/25/2025 1:53:51 PM	Nicole Nelson	Draft
6/25/2025 1:55:16 PM	Nicole Nelson	Submitted
6/25/2025 1:55:22 PM	Nicole Nelson	In Process

## Revisions

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Revision	Revision Date	Revision By
Revision 1	5/30/2025 12:55 PM	Leah Sober
Revision 2	6/25/2025 1:53 PM	Nicole Nelson

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZR7R-6N0MY, version 1)

## Details

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**Submission ID** HQC-ZR7R-6N0MY

**Status** In Process

## Form Input

---

### 1. Submitter Information. (1 of 2)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Leah                Sober

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type**    **Number**        **Extension**

Business        2622602000    3546

**Email**

lmsober@scj.com

**Mailing Address**

1525 HOWE ST

RACINE, WI 53403-2237

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 1. Submitter Information. (2 of 2)

#### Instructions

Provide the contact information for your organization.

**a. Submitter**

**First Name      Last Name**

Nicole              Nelson

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type      Number              Extension**

Business          2622602000

**Email**

nmmnelson@scj.com

**Mailing Address**

1525 HOWE ST  
RACINE, WI 53403-2237

**b. Additional Submitter Details**

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

**2. Brief description of the type of product to which PFAS is intentionally added.**

**2a. Product Category**

**Product Category Name**

Cleaning product

**The descriptive name of the product.**

Wax Melts Electric Warmer Device

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

We are submitting this Currently Unavoidable Use (CUU) application out of an abundance of caution, as it is not clear whether the items in question fall within the scope of Maine’s PFAS regulations both because of their forms and functions as well as the fact that they may not have been intentionally formulated with PFAS.

Although these products may not have been intentionally formulated with PFAS and may not clearly fall within a regulated product category, we recognize that certain internal components within the delivery system may raise questions under the current regulatory definitions. Accordingly, we are submitting this CUU request provisionally to seek clarification and with reservation of rights to contest the characterizations under Maine’s PFAS regulations.

This submission is made in good faith, with the intent to cooperate fully with the Maine Department of Environmental Protection and to support the state’s efforts to reduce PFAS exposure.

Glade Wax Melts Electric Warmer Device is an electric fragrance warmer that gently heats scented wax cubes to release fragrance into the air. It plugs into a wall outlet and uses a warming plate instead of an open flame, making it a flameless alternative to candles. As the wax melts, it fills the room with a continuous, pleasant scent. The wax is replaceable and comes in a variety of fragrances to suit different moods and seasons.

There are two tubes within the Resistor Assembly which contain some amount of Polytetrafluoroethylene (PTFE) CAS 9002-84-0. The total amount of PTFE in the total device amounts to 0.023%. There is not direct consumer exposure to the material because it is contained within the device.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

<b>GPC Category</b>
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
8516.79.0000

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

445110-Supermarkets and Other Grocery (except Convenience) Stores  
455211-Warehouse Clubs And Supercenters  
455210-Warehouse Clubs, Supercenters, And Other General Merchandise Retailers

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

---

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

PTFE-containing tubes within the resistor assembly play a vital role in ensuring electrical and thermal safety. They provide a durable, flame-retardant barrier around conductive elements, protecting against high temperatures, humidity, and mechanical stress such as repeated flexing or movement during device operation. This resilience helps prevent insulation failure, reducing the risk of short circuits, overheating, or fire. PTFE's chemical stability and resistance to degradation make it an ideal material for maintaining long-term safety and reliability in household heating and control systems.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

---

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

PTFE-containing tubes within the resistor assembly serves as a critical protective barrier, helping to prevent human contact with live electrical parts and reducing the risk of electric shock. Its durability also helps ensure that the wiring resists fatigue-related wear over time, supporting the product's safe operation throughout its intended lifespan and warranty period.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

PTFE is uniquely suited for critical electrical and thermal applications due to their exceptional combination of flame resistance, chemical inertness, thermal stability, and mechanical durability. These properties make them indispensable for ensuring long-term safety, insulation integrity, and reliability in environments exposed to heat, electrical stress, and physical movement.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

**5. Description of reasonably available alternatives for this specific use of PFAS.**

---

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

"While alternative materials like silicone may offer some similar benefits such as flexibility and heat resistance they typically do not match PTFE's full performance profile, particularly in terms of chemical resistance and long-term endurance. As such, replacing PTFE would require extensive requalification of the product.

This requalification would involve comprehensive testing and re-certification, including but not limited to:

- Mechanical endurance testing (e.g., flexing, fatigue, and abrasion resistance)
  - Impact and drop testing (to simulate real-world handling and stress)
  - Thermal testing (exposure to high and low temperatures, thermal cycling)
  - Overvoltage and surge testing (to ensure electrical safety under fault conditions)
  - Chemical compatibility testing (to assess resistance to oils, solvents, and cleaning agents)
  - Flammability and insulation testing (to meet safety standards)
- Additionally, any material change would require re-certification under applicable UL standards

This includes:

- Performance testing (e.g., dielectric strength, thermal aging)
- Durability testing (e.g., fatigue resistance, environmental cycling)
- Safety testing (e.g., flame retardancy, insulation integrity)
- UL re-certification under standards"

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

See above summary.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

Yes, the materials such as silicone are available in sufficient quantities to meet production needs. However, transitioning to alternative materials like silicone would require time for qualification. This includes extensive performance, safety, and durability testing, as well as re-certification under industry standards such as UL 758 and UL 94. While not mandated by federal or state law, UL certification is widely adopted across the industry to demonstrate compliance with Consumer Product Safety Commission (CPSC) expectations and to ensure product safety and market acceptance.

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

Not currently available.

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Not available.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

The reason for the material is for device durability and performance, not manufacturing.

**Attach supporting documentation if necessary,**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

---

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

We acknowledge that these products may also fall within the scope of Minnesota's PFAS prohibitions. However, we understand that the Minnesota Legislature has provided a temporary exemption through enforcement discretion for electronic and other internal components in this category. The state is actively evaluating how to address this regulatory complexity, and we are monitoring developments closely to ensure continued compliance.

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
------------------	-----------------------	----------------------	------------------	----------------------------	-----------------

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

PFAS are capable of causing a variety of effects including cancer, reproductive effects, immune effects, and other health outcomes, however, the effects depends on the dose, duration and the route of exposure. In this product, exposure to PFAS is not expected thus the health risk is minimal.

1. PMID: 33017053

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

Direct exposure to humans in this product is not expected as the PTFE is a coating around the heating element inside of the device housing.

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

Toxicological studies<sup>1</sup> indicated that PTFE meets the criteria suggested by OECD for polymer of low concerns (PLCs). PLCs have insignificant environmental impacts. PTFE has a higher molecular weight and are less likely to pose a hazard than lower molecular weight polymers. It is stable in the environment, not soluble in water and not subject to long-range transport. It is not bioavailable or bio accumulative. It has low molecular weight leachables. Due to their property and low concerns, there is currently no suitable alternatives<sup>2</sup>.

1. <https://pubmed.ncbi.nlm.nih.gov/29424474/>

2. <https://product.enhesa.com/826977> (login required)

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

No pathways for direct environmental releases are anticipated from the use of this product.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

The Wax Melt warmer can be used indefinitely with new wax cubes.

The device should be disposed of as electronic waste once it no longer functions. Because it contains electrical components, it's best to take it to an electronics recycling center or a household hazardous waste facility. However, if these options aren't accessible, some of these devices may unfortunately end up in landfills.

**Additional Supportive Attachments**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Landfill

Other: Electronic waste

**c. The recycling rate of the product.**

0

**10. This section relates to Confidential Business Information.**

**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

Section Number	Question Letter
NONE PROVIDED	NONE PROVIDED

**Status History**

	User	Processing Status
5/30/2025 5:35:47 PM	Leah Sober	Draft
5/30/2025 5:44:58 PM	Leah Sober	Submitted
5/30/2025 5:45:02 PM	Leah Sober	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZQJK-QWWN2, version 1)

## Details

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**Submission ID** HQC-ZQJK-QWWN2

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 2)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Leah                Sober

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type**    **Number**        **Extension**

Business        2622602000    3546

**Email**

lmsober@scj.com

**Mailing Address**

1525 HOWE ST

RACINE, WI 53403-2237

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 1. Submitter Information. (2 of 2)

#### Instructions

Provide the contact information for your organization.

### a. Submitter

**First Name**      **Last Name**

Nicole              Nelson

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son Inc.

**Phone Type**      **Number**              **Extension**

Business              2622602000

**Email**

nrmnelson@scj.com

**Mailing Address**

1525 HOWE ST

RACINE, WI 53403-2237

### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

## 2. Brief description of the type of product to which PFAS is intentionally added.

### 2a. Product Category

**Product Category Name**

Cleaning product

**The descriptive name of the product.**

Scented Oil Devices

### b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.

We are submitting this Currently Unavoidable Use (CUU) application out of an abundance of caution, as it is not clear whether the items in question fall within the scope of Maine's PFAS regulations both because of their forms and functions as well as the fact that they may not have been intentionally formulated with PFAS.

Although these products may not have been intentionally formulated with PFAS and may not clearly fall within a regulated product category, we recognize that certain internal components within the delivery system may raise questions under the current regulatory definitions. Accordingly, we are submitting this CUU request provisionally to seek clarification and with reservation of rights to contest the characterizations under Maine's PFAS regulations.

This submission is made in good faith, with the intent to cooperate fully with the Maine Department of Environmental Protection and to support the state's efforts to reduce PFAS exposure.

The device in the following products:

Glade's PlugIns's Scented Oil PLUS Warmer Device

Glade's PlugIns's Scented Oil Warmer Device

Glade's Scentflow Warmer Device

Mrs. Meyer's Clean Day's Premium Scented Oil Diffuser Device

These devices are electric air fresheners that plug into a wall outlet and slowly releases fragrance from a small oil-filled refill. As the device warms the oil, it disperses a continuous scent into the room. It's refillable, adjustable for scent strength, and comes in a variety of fragrances to help freshen the air and create a pleasant atmosphere in your home.

There is a coated wire within plug deck that contains some amount of Polytetrafluoroethylene (PTFE) CAS 9002-84-0. The total amount of PTFE in the total device amounts to 0.010%. There is no direct consumer exposure to the material because it is contained within the device.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
8516.79.0000

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

445110-Supermarkets and Other Grocery (except Convenience) Stores  
455211-Warehouse Clubs And Supercenters  
455210-Warehouse Clubs, Supercenters, And Other General Merchandise Retailers

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

---

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

The PTFE within wiring jackets plays a critical role in electrical safety by providing a robust, flame-retardant barrier around stranded copper conductors. Its exceptional resistance to heat, cold, humidity, and mechanical stress—such as repeated bending from plug decks or control knobs—helps prevent insulation failure that could lead to short circuits or fires. Because PTFE is chemically stable and slow to degrade, it ensures long-term reliability and protection in household electronics, making it a key material for maintaining safe and consistent device performance.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

---

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

The inclusion of PTFE in portions of the wire jacket serves as a critical protective barrier, helping to prevent human contact with live electrical parts and reducing the risk of electric shock. Its durability also helps ensure that the wiring resists fatigue-related wear over time, supporting the product's safe operation throughout its intended lifespan and warranty period.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

PTFE is uniquely suited for critical electrical and thermal applications due to their exceptional combination of flame resistance, chemical inertness, thermal stability, and mechanical durability. These properties make them indispensable for ensuring long-term safety, insulation integrity, and reliability in environments exposed to heat, electrical stress, and physical movement.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
------	----------

**5. Description of reasonably available alternatives for this specific use of PFAS.**

---

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

While alternative materials like silicone may offer some similar benefits such as flexibility and heat resistance they typically do not match PTFE's full performance profile, particularly in terms of chemical resistance and long-term endurance. As such, replacing PTFE would require extensive requalification of the product.

This requalification would involve comprehensive testing and re-certification, including but not limited to:

- Mechanical endurance testing (e.g., flexing, fatigue, and abrasion resistance)
  - Impact and drop testing (to simulate real-world handling and stress)
  - Thermal testing (exposure to high and low temperatures, thermal cycling)
  - Overvoltage and surge testing (to ensure electrical safety under fault conditions)
  - Chemical compatibility testing (to assess resistance to oils, solvents, and cleaning agents)
  - Flammability and insulation testing (to meet safety standards)
- Additionally, any material change would require re-certification under applicable UL standards

This includes:

- Performance testing (e.g., dielectric strength, thermal aging)
- Durability testing (e.g., fatigue resistance, environmental cycling)
- Safety testing (e.g., flame retardancy, insulation integrity)
- UL re-certification under standards

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

See above summary.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

Yes, the materials such as silicone are available in sufficient quantities to meet production needs. However, transitioning to alternative materials like silicone would require time for qualification. This includes extensive performance, safety, and durability testing, as well as re-certification under industry standards such as UL 758 and UL 94. While not mandated by federal or state law, UL certification is widely adopted across the industry to demonstrate compliance with Consumer Product Safety Commission (CPSC) expectations and to ensure product safety and market acceptance.

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

Not currently available.

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Not available.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

The reason for the material is for device durability and performance, not manufacturing.

**Attach supporting documentation if necessary,**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

---

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

We acknowledge that these products may also fall within the scope of Minnesota's PFAS prohibitions. However, we understand that the Minnesota Legislature has provided a temporary exemption through enforcement discretion for electronic and other internal components in this category. The state is actively evaluating how to address this regulatory complexity, and we are monitoring developments closely to ensure continued compliance.

## 7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.

---

a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
------------------	-----------------------	----------------------	------------------	----------------------------	-----------------

b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.

NONE PROVIDED

c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.

NONE PROVIDED

d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.

NONE PROVIDED

Attach additional information.

NONE PROVIDED  
Comment  
NONE PROVIDED

## 8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.

---

a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.

"PFAS are capable of causing a variety of effects including cancer, reproductive effects, immune effects, and other health outcomes, however, the effects depends on the dose, duration and the route of exposure. In this product, exposure to PFAS is not expected thus the health risk is minimal.

1. PMID: 33017053"

b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.

Direct exposure to humans in this product is not expected as the PTFE is a coating around the heating element inside of the device housing.

c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.

"Toxicological studies<sup>1</sup> indicated that PTFE meets the criteria suggested by OECD for polymer of low concerns (PLCs). PLCs have insignificant environmental impacts. PTFE has a higher molecular weight and are less likely to pose a hazard than lower molecular weight polymers. It is stable in the environment, not soluble in water and not subject to long-range transport. It is not bioavailable or bio accumulative. It has low molecular weight leachables. Due to their property and low concerns, there is currently no suitable alternatives<sup>2</sup>.

1. <https://pubmed.ncbi.nlm.nih.gov/29424474/>

2. <https://product.enhesa.com/826977> (login required)"

d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.

No pathways for direct environmental releases are anticipated from the use of this product.

If needed, attach additional information.

NONE PROVIDED  
Comment  
NONE PROVIDED

## 9. This section relates to the product's fate at the end of its lifecycle.

---

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

The Plug-in device is designed to be used repeatedly with new scented oil refills.

Additionally, these are considered small electronic appliances therefore the device should be disposed of as electronic waste when it no longer works. Because it contains electrical components, it's best to take it to an electronics recycling center or a household hazardous waste facility for proper handling. However, in areas without convenient recycling options, some of these devices may end up in landfills, contributing to electronic waste.

**Additional Supportive Attachments**

NONE PROVIDED

**Comment**

NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Other: Electronic waste

Landfill

**c. The recycling rate of the product.**

0

**10. This section relates to Confidential Business Information.**

**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

Section Number	Question Letter
NONE PROVIDED	NONE PROVIDED

**Status History**

	User	Processing Status
5/30/2025 4:57:58 PM	Leah Sober	Draft
5/30/2025 5:27:45 PM	Leah Sober	Submitted
5/30/2025 5:27:52 PM	Leah Sober	In Process

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-J9ZH-K4EZJ, version 5)

## Details

---

**Submission ID** HQC-J9ZH-K4EZJ

**Status** In Process

## Form Input

---

### 1. Submitter Information. (1 of 2)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Justin              DeYoung

**Title**

SHERPS Manager, The Americas

**Organization Name**

Selig Group

**Phone Type**    **Number**            **Extension**

Business          8157852100    174

**Email**

jdeyoung@seliggroup.com

**Mailing Address**

5569 33RD ST SE

GRAND RAPIDS, MI 49512-2061

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 1. Submitter Information. (2 of 2)

#### Instructions

Provide the contact information for your organization.

**a. Submitter**

**First Name      Last Name**

Justin              DeYoung

**Title**

NONE PROVIDED

**Organization Name**

Selig Group

**Phone Type      Number              Extension**

Business          8157852100      174

**Email**

jdeyoung@seliggroup.com

**Mailing Address**

5569 33RD ST SE

GRAND RAPIDS, MI 49512-2061

**b. Additional Submitter Details**

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

**2. Brief description of the type of product to which PFAS is intentionally added.**

**2a. Product Category**

**Product Category Name**

Cleaning product

**The descriptive name of the product.**

Vented Capliners of foam and induction foils

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

Capliners are multi-layered laminated/extruded structures consisting of various substrates like foil, films, resins, adhesive layers, etc. providing a tamper evident or clean peel bond to the container being packaged. These capliners provide extended shelf life, moisture/oxygen barriers, leak prevention, venting, etc. PTFE (considered a PFAs by definition now) vents are used in our capliner products produced for various industries. The vents are applied to our finished capliner products by our Grand Rapids, MI location.

The cleaning product these vents are used on is Bleach. Bleach off gases and causes the container to expand. Without these vents, the package will more or less burst.

Haircare products (cosmetic) may also use our vented liners. These products also off gas as well, creating the same scenario as bleach and the packaging having the potential to burst.

Liquid Ag Chemical also use our vented liners.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
3921.19.0000
7607.20.5000
3923.50.0000

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**  
 322299-All Other Converted Paper Product Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

The introduction of the use of expanded polytetrafluoroethylene (ePTFE) into packages has allowed for significant advances in safe and effective packaging across multiple industries ♦ Food, Life Sciences, Personal Care, Agrochemicals, Cleaning & Sanitation. The advancements of ePTFE to provide safe and effective packages has supported industry efforts to increase the efficacy of products, increase the concentration of active ingredients (to reduce transportation waste), and to reduce the weight and the complexity of plastic containers. PTFE in itself is a relatively inert compound and is widely used in the pharmaceutical/medical industries.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

The specific characteristics of ePTFE are unmatched by any alternates available today. Removing ePTFE as a functional component to packaging will eliminate the benefits ePTFE provides ♦ lighter weight packages, higher concentration of active ingredients, more effective products, and the use of less complicated packaging. The relative % of ePTFE to the overall disc (capliner) is typically less than 1%. ePTFE is the perfect venting material as it is a one size fits all solution suitable for use in a lot of different applications such as oleophobic/hydrophobic applications. There are no current suitable replacement materials on the market that will meet all of the various different applications that need vented material solutions.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Removing ePTFE as a functional component to packaging will eliminate the benefits ePTFE provides ♦ lighter weight packages, higher concentration of active ingredients, more effective products, and the use of less complicated packaging.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

**5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

There are no reasonably available alternatives to ePTFE on the market. All solutions are currently being worked on internally by Research and Development and Selig's work with university's. This is an incredibly difficult solution to develop from scratch.

Alternatives assessed, but with minimal success are expanded polypropylene membranes, cellulose acetate membranes, polyester polyethersulfone membranes, Polyethylene, and Polyolefin membranes

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

All of the materials exhibit either extremely slow air flow or lack the required hydrobic specifications. In most cases the alternative vented materials can break down due to some of the products being package with it like chemicals, etc. ePTFE is the perfect solution because it is inert and does not react with the products being packaged in the same ways the failed solutions do.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

Alternative materials are still in development so they are not available in the quantities that would be needed. This is purely a from scratch project that industry in general has not developed a solution for yet.

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

The anticipated cost differences for alternatives (that are not commercially available or fully developed yet) vs. the current ePTFE solution is calculated at roughly 10 times the current costs.

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

ePTFE is a relatively inert compound that has been approved in food use contact and in the medical industries for many decades. It is on many approved migration/extraction approved chemicals lists globally for food contact use materials.

PTFE:

PTFE is a synthetic fluoropolymer, a high-molecular-weight chain composed of repeating tetrafluoroethylene units. It is known for its inertness, resistance to chemicals and heat, and non-stick properties. Due to its size, PTFE is generally considered to be less bioavailable and mobile in the environment compared to smaller PFAS molecules.

Biodegradability: PTFE is highly stable and does not readily degrade in the environment. PFOS, on the other hand, is persistent and can remain in the environment for extended periods.

Bioavailability: Due to its size, PTFE is less likely to be absorbed into the body compared to PFOS.

Environmental Concerns:

While both PTFE and PFOS are PFAS, the focus of environmental and health concerns is often on smaller, more bioavailable PFAS like PFOS, rather than PTFE.

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

Process would be unchanged, we just do not have available raw materials or solutions.

**Attach supporting documentation if necessary,**

NONE PROVIDED

**Comment**

NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

---

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

30 states have adopted 155 policies

35 states have introduced 208 policies

[https://www.saferstates.org/bill-tracker/?states=All&toxic\\_chemicals=PFAS](https://www.saferstates.org/bill-tracker/?states=All&toxic_chemicals=PFAS)

This is constantly evolving at a state level and internationally.

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
Other: Vented Closures for Packaging	Packaging	NONE PROVIDED	Absolute		
Cleaning product	Packaging	NONE PROVIDED	Absolute		
Cosmetic product	Packaging	NONE PROVIDED	Absolute		
Products listed that do not contain intentionally added PFAS but are offered for sale, or distributed for sale in a fluorinated container or in a container that otherwise contains intentionally added PFAS	Packaging	NONE PROVIDED	Absolute		

b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.

There is no alternative available. There is no known vent material that does not consist of PTFE. Alternative material has been tested but do not meet the demands of the products that are contained within the vented containers. (Bleach, Soaps, Ag Chem. etc.)

c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.

The PTFE is inert; the alternative membranes are either hydrophilic and must be treated to become hydrophobic or are hydrophobic but will become attacked by the products it is intended to provide venting for. In most cases hydrophobic coatings will contain some level of PFAS.

d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.

The PTFE is inert; the alternative membranes are either hydrophilic and must be treated to become hydrophobic or are hydrophobic but will become attacked by the products it is intended to provide venting for. In most cases hydrophobic coatings will contain some level of PFAS.

**Attach additional information.**

NONE PROVIDED

**Comment**

Alternative developments done by Selig and Virginia Tech has failed when challenged by various products typical

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.

NONE PROVIDED

b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.

NONE PROVIDED

c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.

NONE PROVIDED

d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.

NONE PROVIDED

If needed, attach additional information.

NONE PROVIDED

Comment

NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.

Landfill and vary little chemical and physical recycling capabilities that are still be developed.

**Additional Supportive Attachments**

NONE PROVIDED

Comment

NONE PROVIDED

b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?

Landfill

c. The recycling rate of the product.

1

**10. This section relates to Confidential Business Information.**

1. Please list the section (number) and question (letter) of submission information which contains confidential business information.

Section Number	Question Letter
NONE PROVIDED	NONE PROVIDED

**Status History**

	User	Processing Status
6/27/2025 12:33:57 PM	Justin DeYoung	Draft
6/27/2025 12:36:56 PM	Justin DeYoung	Submitted
6/27/2025 12:37:02 PM	Justin DeYoung	In Process

**Revisions**

Revision	Revision Date	Revision By
Revision 1	5/13/2025 2:56 PM	Justin DeYoung
Revision 2	6/16/2025 4:18 PM	Justin DeYoung
Revision 3	6/19/2025 11:16 AM	Justin DeYoung
Revision 4	6/23/2025 11:05 AM	Justin DeYoung
Revision 5	6/27/2025 12:33 PM	Justin DeYoung

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-ZQC8-3D9RZ, version 3)

## Details

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**Submission ID** HQC-ZQC8-3D9RZ

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 2)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Leah                Sober

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son, Inc.

**Phone Type**    **Number**            **Extension**

Business        2622602000    3546

**Email**

lmsober@scj.com

**Mailing Address**

1525 HOWE ST

RACINE, WI 53403-2237

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 1. Submitter Information. (2 of 2)

#### Instructions

Provide the contact information for your organization.

**a. Submitter**

**First Name      Last Name**

Nicole              Nelson

**Title**

NONE PROVIDED

**Organization Name**

S.C. Johnson and Son, Inc.

**Phone Type      Number              Extension**

Business              2622602000

**Email**

NMNelson@scj.com

**Mailing Address**

1525 HOWE ST  
RACINE, WI 53403-2237

**b. Additional Submitter Details**

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

**2. Brief description of the type of product to which PFAS is intentionally added.**

**2a. Product Category**

**Product Category Name**

Cosmetic product

**The descriptive name of the product.**

SBS-40 Cream - Cartridge O-Ring

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

We are submitting this Currently Unavoidable Use (CUU) application out of an abundance of caution, as it is not clear whether the items in question fall within the scope of Maine's PFAS regulations both because of their forms and functions as well as the fact that they may not have been intentionally formulated with PFAS.

Although this product may not have been intentionally formulated with PFAS and may not clearly fall within a regulated product category, we recognize that certain internal components within the delivery system may raise questions under the current regulatory definitions. Accordingly, we are submitting this CUU request provisionally to seek clarification and with reservation of rights to contest the characterizations under Maine's PFAS regulations.

This submission is made in good faith, with the intent to cooperate fully with the Maine Department of Environmental Protection and to support the state's efforts to reduce PFAS exposure.

The packaging container or "cartridge" for the following products contains an O-ring that contains Vinylidene fluoride-hexafluoropropene polymer (AKA Viton A) - CAS 9011-17-0:  
- SBS 40 Skin Conditioning Cream Refill

This O-ring is used as a dynamic seal within the lotion and cream specific pump and provides the seal on the liquid pump.

These 1-liter cartridges are used within a wall-mounted dispenser to provide easy dispensing to professionals in the industrial, commercial and healthcare and food service/processing markets.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

<b>GPC Category</b>
NONE PROVIDED

**d. GPC Code, if applicable.**

GPC Code
NONE PROVIDED

**e. HTS Code, if applicable.**

HTS Code
3304.99.5000

**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

561210-Facilities Support Services  
722310-Food Service Contractors  
623312-Assisted Living Facilities for the Elderly

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

These 1-liter lotion cartridges are essential for health and safety because they provide accessible skin hydration in high-risk environments like industrial, healthcare, and food service settings. Regular use helps prevent skin damage, irritation, supporting worker well-being and hygiene compliance in critical sectors.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

Viton as an inert ingredient has superior properties to provide the seal functionality while ensuring that there is chemical compatibility with these complex formulations.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

This material has unique compatibility with the complex formulation bases.

**c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.**

Type	Citation
Not Applicable	NONE PROVIDED

**5. Description of reasonably available alternatives for this specific use of PFAS.**

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

**a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.**

Potential alternatives are silicones, EPDM and other elastomers, however there are current challenges with the compatibility with the formulations.

**b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.**

There is degradation of the material due to chemical incompatibility, which ultimately leads to seal failures. The degradation appears as cracks, brittleness, hardness, or swelling.

**c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.**

Sufficient materials (types) have not been qualified, however with additional time, we believe that we could find alternative materials that could be compatible with these chemistries.

**d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.**

Cost is negligible; the concern again, is compatibility and ultimately functionality of the dispensing system to deliver the product.

**e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.**

Not available

**f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.**

We're also considering redesigning the system to exclude O-rings to provide greater flexibility for usage with various formulation chemistries.

**Attach supporting documentation if necessary,**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

**a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.**

We acknowledge that this product may also fall within the scope of Minnesota's PFAS prohibitions. However, we understand that the Minnesota Legislature has provided a temporary exemption through enforcement discretion for electronic and other internal components in this category. The state is actively evaluating how to address this regulatory complexity, and we are monitoring developments closely to ensure continued compliance.

**7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.**

**a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.**

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
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**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED

**Comment**

NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

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**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

PFAS are capable of causing a variety of effects including cancer, reproductive effects, immune effects, and other health outcomes. The effects depends on the duration, the route of exposure and the dose which is expected to be minimal in this product as the contact to human is indirect.

1. PMID: 33017053

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

The pump in this product contains an O-ring seal that could potentially contact the formula during dispensary. This contact could result in a minimal dermal exposure during product use.

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

Toxicological assessments indicate that Viton A meets the criteria outlined by the OECD for Polymers of Low Concern (PLCs) (OECD, 2009). As a high molecular weight fluoropolymer, Viton A is considered to have minimal environmental risks (Henry et al., 2018). It is chemically and thermally stable, insoluble in water, and non-mobile, which significantly reduces its potential for long-range environmental transport. Additionally, it exhibits low bioavailability and bioaccumulation potential and contains negligible levels of leachable low molecular weight substances (Henry et al., 2018). Due to these properties and its classification as a PLC, there are currently no suitable alternatives that offer the same performance with lower environmental impact. However, the scientific rationale for the low environmental impact of fluoropolymers like Viton A is not conclusively supported, as highlighted by Lohmann et al. (2020), who emphasize that data gaps and methodological limitations hinder definitive assessments of their environmental persistence and toxicity.

References

Henry BJ, Carlin JP, Hammerschmidt JA, Buck RC, Buxton LW, Fiedler H, Seed J, Hernandez O. (2018). A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers. *Integr Environ Assess Manag.* 14(3):316-334. doi: 10.1002/ieam.4035.

Lohmann R, Cousins IT, DeWitt JC, Glöge J, Goldenman G, Herzke D, Lindstrom AB, Miller MF, Ng CA, Patton S, Scheringer M, Trier X, Wang Z. (2020). Are Fluoropolymers Really of Low Concern for Human and Environmental Health and Separate from Other PFAS? *Environ Sci Technol.* 54(20):12820-12828. doi: 10.1021/acs.est.0c03244.

OECD (2009). <https://one.oecd.org/document/ENV/JM/MONO%282009%291/en/pdf>

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

No pathways for direct environmental releases are anticipated from the use of this product. End-of-life disposal to landfill are the main source of environmental exposure.

**If needed, attach additional information.**

NONE PROVIDED

**Comment**

NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

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**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

Empty containers are disposed of as general waste ending up in landfills

**Additional Supportive Attachments**

NONE PROVIDED

**Comment**

NONE PROVIDED

**b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?**

Landfill

**c. The recycling rate of the product.**

0

**10. This section relates to Confidential Business Information.**

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**1. Please list the section (number) and question (letter) of submission information which contains confidential business information.**

<b>Section Number</b>	<b>Question Letter</b>
NONE PROVIDED	NONE PROVIDED

**Status History**

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	<b>User</b>	<b>Processing Status</b>
6/9/2025 5:15:34 PM	Leah Sober	Draft
6/10/2025 5:19:48 PM	Leah Sober	Submitted
6/10/2025 5:19:52 PM	Leah Sober	In Process

**Revisions**

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<b>Revision</b>	<b>Revision Date</b>	<b>Revision By</b>
Revision 1	5/30/2025 4:46 PM	Leah Sober
Revision 2	5/30/2025 5:46 PM	Leah Sober
Revision 3	6/9/2025 5:15 PM	Leah Sober

# PFAS - Currently Unavoidable Use Proposal

version 1.2

(Submission #: HQC-Y1XK-HXXFJ, version 1)

## Details

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**Submission ID** HQC-Y1XK-HXXFJ

**Status** In Process

## Form Input

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### 1. Submitter Information. (1 of 1)

#### Instructions

Provide the contact information for your organization.

#### a. Submitter

**First Name**      **Last Name**

Rony                Khoury

**Title**

Chemical Regulatory Engineer

**Organization Name**

Panasonic Corporation of North America

**Phone Type**    **Number**        **Extension**

Business        2012713024

**Email**

rony.khoury@us.panasonic.com

**Mailing Address**

2 RIVERFRONT PLZ

NEWARK, NJ 07102-5451

#### b. Additional Submitter Details

If you have an additional or co-submitter, you may add them by clicking the Add New Submitter button. You can also add an additional submitter by clicking the Duplicate Submitter button, which will create a new submitter record by copying the first submitter. Duplicate Submitter details can be updated as needed.

### 2. Brief description of the type of product to which PFAS is intentionally added.

#### 2a. Product Category

**Product Category Name**

Upholstered furniture

**The descriptive name of the product.**

Massage Chair

**b. A brief narrative of the product; its physical structure; and appearance; how it functions; and if applicable, its place in larger items, systems, or processes.**

Our massage chairs help to mobilize the spine, promote relaxation, and improve the flexibility of the lower back, middle back, and neck. The stretching techniques of these massage chairs are excellent for post-workout relaxation or to shake off sleep and stiffness as a morning rejuvenation session. Our massage chairs offer a full range of stretching techniques which may include Neck, Pelvis, Chest, Leg, Lower Back, and Core. We offer a range of massage chair models, including compact 27-inch designs and larger models. They are designed for individual use and are made of PFAS-free and flame retardant-free leather upholstery.

To find your GPC Category and code, visit <https://gpc-browser.gs1.org/>

**c. GPC Category, if applicable.**

GPC Category
Household/Office Chairs/Stools (Powered)

**d. GPC Code, if applicable.**

GPC Code
10002192

**e. HTS Code, if applicable.**

HTS Code
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**f. NAICS code for sector or sectors in which the products containing intentionally added PFAS will be utilized.**

337121-Upholstered Household Furniture Manufacturing

**3. Explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

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Maine defines "Essential for health, safety or the functioning of society" to mean: "a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

**a. An explanation of why the availability of PFAS in this specific product is essential for health safety or the functioning of society.**

Massage chairs are beneficial for relaxation and therapeutic purposes, offering better sleep quality, muscle recovery, and stiffness relief. PFAS chemicals are used specifically in the ball bearings of internal mechanical components. They help prevent mechanical noise and ensure smooth and safe operation, while ensuring longevity and performance of the product. Without these PFAS-containing components, these massage chairs would not be able to function as designed.

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
NONE PROVIDED

**4. Description of how the specific use of PFAS in the product is essential to the function of the product.**

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**a. Please provide a description of how and why PFAS is essential to the function of the product. (This may include a description of the negative impact that would be caused by the unavailability of PFAS for use in the product and the subsequent unavailability or unsatisfactory performance of the product).**

PFAS chemicals are used specifically in the ball bearings of internal mechanical components. They help prevent mechanical noise and ensure smooth and safe operation, while ensuring longevity and performance of the product. Without these PFAS-containing components, these massage chairs would not be able to function as designed.

**b. Please provide a description of the specific characteristic or combination of characteristics that necessitate the use of PFAS in the product**

Ball bearings are used to reduce friction and ensure smooth and safe operability of internal mechanical components.

c. If this use of PFAS in the product is required by federal or state law or regulation, please provide the following.

Type	Citation
Not Applicable	NONE PROVIDED

## 5. Description of reasonably available alternatives for this specific use of PFAS.

Please provide a description of reasonably available alternatives for this specific use of PFAS. Include an evaluation of the following aspects in your description (attach supporting documentation if necessary).

### a. Identification of specific compounds, classes of materials, or combinations of materials identified as potential alternatives including the removal of PFAS without substitution.

As of now, according to our parts supplier, the only alternatives that have been tested are PFAS-free alternatives that do not reduce friction and mechanical noise as the PFAS-containing components do. The names of the alternatives have not been made available to us as it is proprietary information.

### b. An assessment of how the materials listed above meet or fail to meet the criteria that necessitate the use of PFAS chemicals.

As stated above, the alternative materials necessitate the use of PFAS chemicals because they do not remove friction noise and ensure smooth operation the way the PFAS-containing components do.

### c. An assessment of whether materials identified above are available in sufficient quantities to meet production needs.

We are not sure at this time whether the alternative materials are available in sufficient quantities.

### d. An assessment of the anticipated cost difference between obtaining PFAS for use in the product subject to the proposal and obtaining the material identified above, for the same purpose.

Information regarding costs have not been made available to us at this time.

### e. A comparison of the known risks to human health and the environment between PFAS and the alternative materials identified above.

The PFAS used in these internal mechanical components is a fluoropolymer that is considered safe and poses little known risks to human health. At this time, we do not know what the risks of the alternative materials are to human health and the environment.

### f. An assessment of whether there are feasible changes to the manufacturing process of the product that would eliminate the need for PFAS.

If a PFAS-free alternative that meets the safety requirements of our product is identified and made available, the need for PFAS in our product would be eliminated. At this time, no known alternative is available to us.

Attach supporting documentation if necessary,

NONE PROVIDED

Comment

NONE PROVIDED

## 6. List of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.

### a. Please provide a list of federal regulations, other State of Maine rules, and regulations of other states which the product is subject to by reason of containing intentionally added PFAS.

Minnesota HF2310 "Amara's Law"  
Colorado HB 22-1345

## 7. List of sales prohibitions that the product is subject to because of containing intentionally added PFAS.

### a. Please provide a list of sales prohibitions that the product is subject to because of containing intentionally added PFAS. If there are no sales prohibitions, please type "none" into the Product Category Name.

Product Category	Product Category Name	Prohibition Citation	Prohibition Type	Have you filed a proposal?	Proposal Status
Upholstered furniture	Massage chairs	Minnesota HF 2310	Based on a process similar to the State of Maine's Currently Unavoidable Use determination	Yes	Other: Minnesota legislature has proposed an amendment to the law that exempts the use of PFAS in internal electrical/mechanical components of all products subject to the 2026 ban and would be prohibited with the 2032 ban.

**b. If a prohibition listed above is absolute, please provide a list of comparable products that the proposer is aware of remaining available for sale, offered for sale, or distributed for sale within that specific jurisdiction.**

NONE PROVIDED

**c. If the prohibition cited above is absolute, please provide justification explaining how products available in compliance with that prohibition are not reasonably available alternatives for the product subject to this CUU proposal in the State of Maine.**

NONE PROVIDED

**d. If the prohibition cited above is absolute, please provide an explanation and supporting documentation of why those products containing PFAS alternatives listed above would not perform as intended in the State of Maine due to differing physical or climate conditions.**

NONE PROVIDED

**Attach additional information.**

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

**8. This section relates to information known or reasonably ascertainable by the submitter regarding the impacts on human health or the environment as a result of PFAS in the product.**

**a. Any information documenting impacts on human health as a result of the specific use of PFAS in the product.**

NONE PROVIDED

**b. Provide a description of the likely pathways of human exposure for the specific use of PFAS in the product.**

NONE PROVIDED

**c. Provide any information documenting environmental impacts because of the specific use of PFAS in the product.**

NONE PROVIDED

**d. Provide a description of any likely pathways for environmental release of PFAS because of the specific use of PFAS in the product.**

NONE PROVIDED

**If needed, attach additional information.**

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

**9. This section relates to the product's fate at the end of its lifecycle.**

**a. Describe the product's fate at the end of its lifecycle, including any product stewardship programs or other government imposed processes.**

As of now, there are no state or federal end-of-life stewardship laws for upholstered furniture, including massage chairs.

**Additional Supportive Attachments**

NONE PROVIDED  
**Comment**  
 NONE PROVIDED

b. How is the product intended to be disposed of, such as landfilling or via a sewage or septage system?

Landfill

c. The recycling rate of the product.

1

## **10. This section relates to Confidential Business Information.**

1. Please list the section (number) and question (letter) of submission information which contains confidential business information.

<b>Section Number</b>	<b>Question Letter</b>
<i>NONE PROVIDED</i>	<i>NONE PROVIDED</i>

## **Status History**

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	<b>User</b>	<b>Processing Status</b>
5/28/2025 1:45:15 PM	Rony Khoury	Draft
6/1/2025 10:45:09 AM	Rony Khoury	Submitted
6/1/2025 10:45:12 AM	Rony Khoury	In Process