#### State of Maine



#### Master Agreement

Effective Date: 04/04/19

Expiration Date: 04/30/20

#### Master Agreement Description: PLY-KRETE ELASTOMERIC CONCRETE

Buyer Information			
William Allen	207-624-7871	ext. NULL	WJE.Allen@maine.gov
Issuer Information			
SHARON KRECHKIN	207-624-3038	ext.	sharon.krechkin@maine.gov
Requestor Information			
Sharon Krechkin	207-624-3038	ext.	sharon.krechkin@maine.gov
Authorized Departments			

#### **Authorized Departments**

17A TRANSPORTATION

## **Vendor Information**

Vendor Line #: 1	
Vendor ID	Vendor Name
VC0000230215	HD SUPPLY CONSTRUCTION SUPPLY LTD
	Alias/DBA

Vendor Address Information 3400 CUMBERLAND BLVD SE

ATLANTA, GA 30339 US

#### Vendor Contact Information Ian Wilson 207-622-0821 ext. ian.wilson@hdsupply.com

#### **Commodity Information**

Vendor Line #: 1

Vendor Name: HD SUPPLY CONSTRUCTION SUPPLY LTD

Commodity Line #: 1

Commodity Code: 96712

Commodity Description: PLY-KRETE ELASTOMERIC CONCRETE

**Commodity Specifications:** 

UOM	<b>Unit Price</b> \$0.00
Free on Board	
Service Start Date	Service End Date
<b>Discount</b> 0.0000 %	
Discount Start Date 04/04/19	Discount End Date 04/30/20
	Free on Board Service Start Date Discount 0.0000 % Discount Start Date

#### <u>TERMS& CONDITIONS</u> <u>MA 190404-139</u>

#### **<u>COMMODITY ITEM:</u>** PLY-KRETE ELASTOMERIC CONCRETE

**<u>CONTRACT PERIOD</u>**: Through April 30, 2020. The State of Maine with vendor approval can opt to issue up to two (2) one (1) year extensions.

**VENDOR CONTACT PERSON:** The contact person will help consumers place orders, inquire about orders that have not been delivered, all shipping issues, quality issues, and any issues pertaining to this Master Agreement. All orders not submitted through a DO will be sent through the contractor's contact person. The contact person will be: **Ian Wilson** Phone: **207-622-0821** Email: <u>ian.wilson@hdsupply.com</u>

**EXTENSION OF CONTRACT:** The Director of Procurement Services may, with the consent of the contractor extend the Contract period beyond the indicated expiration date.

**<u>CANCELLATION OF CONTRACT</u>**: The Division of Procurement Services reserves the right to cancel a contract with a thirty-day written notice OR cancel immediately if the contractor does not conform to terms and conditions and specifications of contract.

**PRICES:** Pricing will be FOB destination to all MaineDOT facilities. Prices are to remain firm for the duration of the contract.

**<u>OUANTITIES</u>**: It is understood and agreed that the contract will cover the <u>actual quantities</u> required by State Agency over the length of the contract.

**ORDERING PROCEDURE:** Delivery orders (DO) will be created in AdvantageME for all orders over \$5000.00. If a DO is used, the DO will be e-mailed to the email address set up in AdvantageME by the Vendor as a .pdf file. Orders less than \$5000.00 can be ordered using a P-Card.

**INVOICES and PAYMENT:** The Contractor shall submit an itemized bill to the Department for materials following delivery for approval and payment. Invoices shall minimally include the following: **Contractor name, address & Contract Number 18P 190404-139, Invoice Date & Number** 

<u>**OUARTERLY REPORT:**</u> The Division of Procurement Services **requires a quarterly report of sales** be faxed to 207-287-6578 within 30 days of the end of each calendar quarter. It will be the responsibility of the vendor to produce a quarterly report. The report must include the dollar value of goods purchased, broken down by Department as well as the total dollar value of purchases made by all Departments.

**PROCUREMENT CARD:** State policy requires vendors to accept the State of Maine Procurement Card (P-Card) as a form of payment, with very rare exceptions. Your company is required to accept these cards. The pricing offered to the State of Maine shall be the final cost to the State of Maine regardless of payment method. No surcharge or other compensation will be allowed. The State of Maine reserves the right to reject your bid if you are unwilling to accept this condition.

## **Specifications**

Fast setting, high strength joint seal manufactured by Polyset Company., or equivalent, shall conform to the following properties:

APPEARANCE@77deg F	Part "A"	Part "B"	Mixed
Packaging	1 can	1 can	w/1 bag of aggregate
Color	Black	Lt. Brown	Black
Viscosity, cps	550 +/- 25	250 +/- 50	-
Wt./gal., lb	8.1 +/- 0.1	10.2 +/- 0.1	-

#### Ratio and Cure:

Mix Ratio	2 part "A"	1 part "B"	By Volume
Mix Ratio	100 "A"	63 "B"	By Weight
Cure	Gel time @ 77 deg F	8-12 minutes	-
Initial Cure	2 hr @ 77 deg F	With Supplied Agg.	-

### **Properties with Aggregate (aggregate type affects results):**

Compressive, psi	3000 min.	ASTM C-579
Brittleness +/- 1 ft-lb	7 ft-lb min.	Ball Drop
Shore D Hardness	62 Avg.	ASTM D-2240

#### **Properties with Binder Only**

Percent Elongation	170 +/- 25	ASTM D-638
Tensile Strength, psi	1650 +/- 200	ASTM D-638
Tear Strength, pli	150+/- 25	ASTM D-624
Shore D Hardness	45 +/- 5	ASTM D-2240
Bond Strength (to wet concrete)	450 psi	Tex 618-J

The product shall be delivered on pallets. The composition of each pallet will depend upon the requested container size for the liquid. The liquid is available in two sizes: Standard Kits (0.52 cu. Ft.) and 5 gallon buckets. 55 gallon drums are available upon request. A price shall be established for each of these units, which will also include delivery.

#### **STATE OF MAINE**

#### GENERAL TERMS AND CONDITIONS FOR GOODS AND/OR SERVICES UNDER BUYER PURCHASE ORDERS (BPOs) AND MASTER AGREEMENTS (MAs)

- **1. DEFINITIONS**: The following definitions are applicable to these standard terms and conditions:
  - a. The term "Buyer" or "State" shall refer to the Government of the State of Maine or a person representing the Government of the State of Maine.
  - b. The term "Department" or "DAFS" shall refer to the State of Maine Department of Administrative and Financial Services.
  - c. The term "Bureau" or "BGS" shall refer to the State of Maine Bureau of General Services.
  - d. The term "Division" shall refer to the State of Maine Division of Purchases.
  - e. The term "Contractor", "Vendor", or "Provider" shall refer to the organization that is providing goods and/or services through the contract to which these standard terms and conditions have been attached and incorporated.
  - f. The term "Contract" or "Agreement" shall refer to the contract document to which these standard terms and conditions apply, taking the format of a Buyer Purchase Order (BPO) or Master Agreement (MA) or other contractual document that is mutually agreed upon between the State and the Contractor.
- 2. WARRANTY: The Contractor warrants the following:
  - a. That all goods and services to be supplied by it under this Contract are fit and sufficient for the purpose intended, and
  - b. That all goods and services covered by this Contract will conform to the specifications, drawing samples, symbols or other description specified by the Division, and
  - c. That such articles are merchantable, good quality, and free from defects whether patent or latent in material and workmanship, and
  - d. That all workmanship, materials, and articles to be provided are of the best grade and quality, and
  - e. That it has good and clear title to all articles to be supplied by it and the same are free and clear from all liens, encumbrances and security interest.

Neither the final certificate of payment nor any provision herein, nor partial nor entire use of the articles provided shall constitute an acceptance of work not done in accordance with this agreement or relieve the Contractor liability in respect of any warranties or responsibility for faulty material or workmanship. The Contractor shall remedy any defects in the work and pay any damage to other work resulting therefrom, which shall appear within one year from the date of final acceptance of the work provided hereunder. The Division of Purchases shall give written notice of observed defects with reasonable promptness.

**3. TAXES**: Contractor agrees that, unless otherwise indicated in the order, the prices herein do not include federal, state, or local sales or use tax from which an exemption is available for purposes of this order. Contractor agrees to accept and use tax exemption certificates when supplied by the Division as applicable. In case it shall ever be determined that any tax included in the prices herein was not required to be paid by Contractor, Contractor agrees to notify the Division and to make prompt application for the refund thereof, to take all proper steps to procure the same and when received to pay the same to the Division.

**4. PACKING AND SHIPMENT**: Deliveries shall be made as specified without charge for boxing, carting, or storage, unless otherwise specified. Articles shall be suitably packed to secure lowest

transportation cost and to conform to the requirements of common carriers and any applicable specifications. Order numbers and symbols must be plainly marked on all invoices, packages, bills of lading, and shipping orders. Bill of lading should accompany each invoice. Count or weight shall be final and conclusive on shipments not accompanied by packing lists.

**5. DELIVERY**: Delivery should be strictly in accordance with delivery schedule. If Contractor's deliveries fail to meet such schedule, the Division, without limiting its other remedies, may direct expedited routing and the difference between the expedited routing and the order routing costs shall be paid by the Contractor. Articles fabricated beyond the Division's releases are at Contractor's risk. Contractor shall not make material commitments or production arrangements in excess of the amount or in advance of the time necessary to meet delivery schedule, and, unless otherwise specified herein, no deliveries shall be made in advance of the Division's delivery schedule. Neither party shall be liable for excess costs of deliveries or defaults due to the causes beyond its control and without its fault or negligence, provided, however, that when the Contractor has reason to believe that the deliveries will not be made as scheduled, written notice setting forth the cause of the anticipated delay will be given immediately to the Division. If the Contractor's delay or default is caused by the delay or default of a subcontractor and subcontractor and without fault of negligence or either of them and the articles or services to be furnished were not obtainable from other sources in sufficient time to permit Contractor to meet the required delivery schedule.

6. FORCE MAJEURE: The State may, at its discretion, excuse the performance of an obligation by a party under this Agreement in the event that performance of that obligation by that party is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party. The State may, at its discretion, extend the time period for performance of the obligation excused under this section by the period of the excused delay together with a reasonable period to reinstate compliance with the terms of this Agreement.

7. **INSPECTION**: All articles and work will be subject to final inspection and approval after delivery, notwithstanding prior payment, it being expressly agreed that payment will not constitute final acceptance. The Division of Purchases, at its option, may either reject any article or work not in conformity with the requirements and terms of this order, or re-work the same at Contractor's expense. The Division may reject the entire shipment where it consists of a quantity of similar articles and sample inspection discloses that ten (10%) percent of the articles inspected are defective, unless Contractor agrees to reimburse the Division for the cost of a complete inspection of the articles included in such shipment. Rejected material may be returned at Contractor's risk and expense at the full invoice price plus applicable incoming transportation charges, if any. No replacement of defective articles of work shall be made unless specified by the Division.

8. INVOICE: The original and duplicate invoices covering each and every shipment made against this order showing Contract number, Vendor number, and other essential particulars, must be forwarded promptly to the ordering agency concerned by the Vendor to whom the order is issued. Delays in receiving invoice and also errors and omissions on statements will be considered just cause for withholding settlement without losing discount privileges. All accounts are to be carried in the name of the agency or institution receiving the goods, and not in the name of the Division of Purchases.

**9. ALTERATIONS**: The Division reserves the right to increase or decrease all or any portion of the work and the articles required by the bidding documents or this agreements, or to eliminate all or any portion of such work or articles or to change delivery date hereon without invalidating this Agreement. All such alterations shall be in writing. If any such alterations are made, the contract amount or amounts shall be adjusted accordingly. In no event shall Contractor fail or refuse to continue the performance of the work in providing of articles under this Agreement because of the inability of the parties to agree on an adjustment or adjustments.

**10. TERMINATION**: The Division may terminate the whole or any part of this Agreement in any one of the following circumstances:

- a. The Contractor fails to make delivery of articles, or to perform services within the time or times specified herein, or
- b. If Contractor fails to deliver specified materials or services, or
- c. If Contractor fails to perform any of the provisions of this Agreement, or
- d. If Contractor so fails to make progress as to endanger the performance of this Agreement in accordance with its terms, or
- e. If Contractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors or if a receiver is appointed on account of its insolvency, or
- f. Whenever for any reason the State shall determine that such termination is in the best interest of the State to do so.

In the event that the Division terminates this Agreement in whole or in part, pursuant to this paragraph with the exception of 8(f), the Division may procure (articles and services similar to those so terminated) upon such terms and in such manner as the Division deems appropriate, and Contractor shall be liable to the Division for any excess cost of such similar articles or services.

**11. NON-APPROPRIATION**: Notwithstanding any other provision of this Agreement, if the State does not receive sufficient funds to fund this Agreement and other obligations of the State, if funds are de-appropriated, or if the State does not receive legal authority to expend funds from the Maine State Legislature or Maine courts, then the State is not obligated to make payment under this Agreement.

**12. COMPLIANCE WITH APPLICABLE LAWS**: Contractor agrees that, in the performance hereof, it will comply with applicable laws, including, but not limited to statutes, rules, regulations or orders of the United States Government or of any state or political subdivision(s) thereof, and the same shall be deemed incorporated herein by reference. Awarding agency requirements and regulations pertaining to copyrights and rights in data. Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers and records of the Contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h), section 508 of the Clean Water Act, (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000). Mandatory standards and policies relating to energy efficiency which are

contained in the state energy conservation plan issued in compliance with Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

**13. INTERPRETATION**: This Agreement shall be governed by the laws of the State of Maine as to interpretation and performance.

**14. DISPUTES**: The Division will decide any and all questions which may arise as to the quality and acceptability of articles provided and installation of such articles, and as to the manner of performance and rate of progress under this Contract. The Division will decide all questions, which may arise as to the interpretation of the terms of this Agreement and the fulfillment of this Agreement on the part of the Contractor.

**15. ASSIGNMENT**: None of the sums due or to become due nor any of the work to be performed under this order shall be assigned nor shall Contractor subcontract for completed or substantially completed articles called for by this order without the Division's prior written consent. No subcontract or transfer of agreement shall in any case release the Contractor of its obligations and liabilities under this Agreement.

**16. STATE HELD HARMILESS**: The Contractor agrees to indemnify, defend, and save harmless the State, its officers, agents, and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, material men, laborers and other persons, firm or corporation furnishing or supplying work, services, articles, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of this Agreement.

**17. SOLICITATION**: The Contractor warrants that it has not employed or written any company or person, other than a bona fide employee working solely for the Contractor to solicit or secure this Agreement, and it has not paid, or agreed to pay any company, or person, other than a bona fide employee working solely for the Contractor any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon, or resulting from the award for making this Agreement. For breach or violation or this warranty, the Division shall have the absolute right to annul this agreement or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee.

**18.** WAIVER: The failure of the Division to insist, in any one or more instances, upon the performance of any of the terms, covenants, or conditions of this order or to exercise any right hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant, or condition or the future exercise of such right, but the obligation of Contractor with respect to such future performance shall continue in full force and effect.

**19. MATERIAL SAFETY**: All manufacturers, importers, suppliers, or distributors of hazardous chemicals doing business in this State must provide a copy of the current Material Safety Data Sheet (MSDS) for any hazardous chemical to their direct purchasers of that chemical.

**20. COMPETITION**: By accepting this Contract, Contractor agrees that no collusion or other restraint of free competitive bidding, either directly or indirectly, has occurred in connection with this award by the Division of Purchases.

**21. INTEGRATION**: All terms of this Contract are to be interpreted in such a way as to be consistent at all times with this Standard Terms and Conditions document, and this document shall take precedence over any other terms, conditions, or provisions incorporated into the Contract.

#### **Appendix D**

#### STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES DIVISION OF PROCUREMENT SERVICES

#### MUNICIPALITY POLITICAL SUBDIVISION and SCHOOL DISTRICT PARTICIPATION CERTIFICATION

## RFQ # 17A 190313-267 PLY-KRETE ELASTOMERIC CONCRETE

The Division of Procurement Services is committed to providing purchasing opportunities for **municipalities, political subdivisions and school districts** in Maine by allowing them access, through our vendors, to our contract pricing. A bidder's willingness to extend contract pricing to these entities will be taken into consideration in making awards.

Will you accept orders from political subdivisions and school districts in Maine at the prices quoted?

~

Yes

Yes, with conditions as follows:

No

Name of Company: HD SUPPLY CONSTRUCTION SUPPLY LTD

Address:

23 LEIGHTON RD, AUGUSTA, ME 04330

Printed Name: \_\_\_\_ IAN WILSON

Signature: Luhr

Date: 3/18/2019



# **Safety Data Sheet**

## 1. Product and company identification

Product Name	Ply-Krete <sup>®</sup> FS - Part A	
Internal Code(s)	261110; 261114; 261160; 261161; 261162; 261164; 261171	
Product Type	Polyol Resin	
Product Use	Two-Component Elastomeric Concrete	
Manufacturer/Supplier	Polyset Company, Inc. P.O. Box 111 65 Hudson Avenue Mechanicville, NY 12118 U.S.A.	www.polyset.com info@polyset.com
Revision Date	29-June-2015	
Telephone	For 24-Hour Emergency Respon Call ChemTel: (800) 255-3924 (U +1-813-248-0585 (	.S./Canada)
	For Other Product or Technical	Information

Call Polyset Company, Inc.: (518) 664-6000

## 2. Hazards identification

Product Form	Black Liquid		
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).		
Hazard Category	Acute Toxicity	4	Acute Toxicity (Oral)
Classification:	Specific Target Organ Toxicity – Single Exposure	2	Oral; Central Nervous System, Kidney
	Specific Target Organ Toxicity – Repeated/Prolonged Exposure	2	Oral; Kidney



Signal Word:

GHS Pictogram(s):

WARNING

Hazard Statement:	H302	Harmful if swallowed.
	H371	May cause damage to organs (Central nervous system, Kidney)
	H373	May cause damage to organs (Kidney) through prolonged or repeated exposure.

#### **Precautionary Statements:**

Prevention:	P264 P270 P260	Wash hands and exposed skin thoroughly after handling.Do not eat, drink or smoke when using this product.Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
Response:	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
	P330	Rinse mouth.
	P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.

	P314	Get medical advice/ attention in you feel unwell.
Storage:	P405	Store locked up.
Disposal:	P501	Dispose of contents / container to a disposal facility in accordance with all local / national / international regulations.

# 3. Composition/Information on ingredients

Ingredient name	<u>CAS number</u>	<u>WT %</u>
Diethylene Glycol	111-46-6	4.0 – 8.0%
Carbon Black	1333-86-4	0.8 – 1.0%
	1333-86-4	0.8 - 1.0%

## 4. First aid measures

Eye contact	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If eye irritation persists, consult a doctor/physician.	ı	
Skin contact	Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).		
Inhalation	Move the exposed person to fresh air at once. If breathing has stopped, perfo artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Get medical attention immediately.	у	
Ingestion	If product is ingested, do not induce vomiting and contact a physican or Poiso Control Center. Rinse mouth with water. If unconscious place in recovery positi and seek medical advice. Never give anything by mouth to an unconscious person.		
Notes to physician	Treat symptomatically.		
Potential acute health effe			
Inhalation	None anticipated under normal conditions of use. If product is sprayed or aspirated, inhalation may become a relavant route of exposure. May cause irritation of the mucous membranes. May cause central nervous system depression.		
Ingestion	Moderate oral toxicity. May cause CNS effects, blood disturbances and dama to kidney and other organs.	ge	
Skin	Virtually nontoxic after a single skin contact. May cause mild irritation.		
Eyes	Eye contact may cause mild irritation.		
<u>Potential chronic health e</u> Chronic effects	Infects Repeated exposure to the substance by dermal administration leads to effects similar to those found after single exposure.	S	
Carcinogenicity	This product contains Carbon Black (CAS # 1333-86-4) which is classified as possibly carcinogenic to humans by IARC (IARC Group 2B) via inhalation. This is not a relevant route of exposure during normal use of this product.		
Developmental effects	None known.		
Fertility effects	None known.		
Target organs	Central Nervous System; Kidney		
Over-exposure signs/sym Inhalation	Iptoms Irritation of respiratory tract and mucous membranes. Central Nervous Syster efects.	n	
Ingestion	Central Nervous System effects, Irritation, nausea		
6/20/2015		2/	

Skin Irritation

EyesIrritationMedical conditions<br/>aggravated by<br/>over-exposureNone known.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

Flammability properties of the product	Flash Point: 138°C (280°F) Flash Point Method Used: Pensky-Martens Closed Cup (ASTM D-93) Flammable Limits in Air (Lower - % by volume): Not Determined Flammable Limits in Air (Upper - % by volume): Not Determined		
Extinguishing media Suitable	Water, dry extinguishing media, carbon dioxide, foam		
Not suitable	High-Pressure Water Spray (may spread burning material).		
Special exposure hazards	None known.		
Hazardous combustion products	Carbon Monoxide, Carbon Dioxide.		
Unusual Fire and Explosion Hazards	Sealed, fire-exposed containers may build up dangerous pressure, potentially resulting in explosive rupture. Keep sealed fire-exposed containers cool with water spray.		
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment, including self-contained breathing apparatus and turn-out gear.		

## 6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Clear area. Ensure adequate ventilation. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Spill Response	Dike spillage. Clean up large spills with vacuum truck. Soak up small spills with absorbent material and place in labeled containers for recovery or disposal.

## 7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.
Storage	Keep in the original container or an approved alternative made from a compatible material, kept tightly sealed when not in use. Take measures to prevent the introduction of water or atmospheric moisture. Store at room temperature in a dry place away from heat and direct sunlight. Store in accordance with all local and government regulations. Recommended storage temperature: 59 – 95°F (15 - 35°C)

CAS		Exposure Limits				
Number	Chemical Identity	ACGIH		OSHA		Other
Number		TWA	STEL	PEL	STEL	Other
111-46-6	Diethylene Glycol	N.E.	N.E.	N.E.	N.E.	N.E.
1333-86-4	Carbon Black (limits as total dust)	3.5 mg/m <sup>3</sup>	N.E.	3.5 mg/m <sup>3</sup>	N.E.	3.5 mg/m <sup>3</sup> (Canada)

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering measures	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated equipment or clothing should be cleaned after each use or disposed of. Ensure that eyewash stations and safety showers are located in the work area.
Respiratory	Use a properly fitted, air-purifying or air-supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Eyes	Safety glasses with side-shields or chemical splash goggles are recommended.
Skin	Chemical resistant protective gloves are required. Suitable materials include: nitrile rubber. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

# 9. Physical and chemical properties

Form	Liquid
Color	Black
рН	Not applicable
Boiling point	> 200°C (decomposes)
Freezing Point	-8 to -6.5°C (18 - 20.3°F)
Specific gravity	1.00
Vapor pressure	< 0.001 mmHg
Odor threshold	Slight, characteristic odor
Solubility in water	Slightly soluble
Evaporation rate	Not Determined
Vapor density	Not Determined

# 10. Stability and reactivity

Stability	The product is stable. Hazardous polymerization will not occur.		
Conditions to avoid	None known.		
Materials to avoid	Reactive or incompatible with the following materials: Strong oxidizers, isocyanates.		

Other hazards

May present a slipping hazard if spilled.

HazardousDecomposition products may include the following materials: Carbon Monoxide,<br/>Carbon Dioxide.

## **11. Toxicological information**

#### Acute toxicity

	LD50 Oral LD50 Oral LC50 Inhala LD50 Derm		Rat Human Rat Rabbit	<ul> <li>&gt; 5,000 mg/kg;</li> <li>&gt; 5,000 mg/kg (estimated)</li> <li>&gt; 50.8 mg/L (4 Hour - estimated)</li> <li>&gt; 2,000 mg/kg</li> </ul>
Sensitization	Skin Sensitization			Not classified
Carcinogenicity Classific: Carbon Black (CAS # 1333-86-4)			ated as a ca	carcinogenic to humans) arcinogen

#### **12. Ecological information**

#### **Environmental effects**

<u>Ecotoxicity</u>	Fish (estimate based on mixture data) LC50: estimated to be > 100 mg/L Exposure time: 96 h Acute and chronic toxicity to fish is very low.
	Aquatic invertebrates Acute and chronic toxicity to freshwater and marine invertebrates is very low.
<b>Biodegradability</b>	Not readily biodegradable.
Additional Information	None.
13. Disposal co	nsiderations

#### Waste disposal

.

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection & waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

.

The data provided in this section is for information only and may not be specific to each package size or mode of transport. Apply the appropriate regulations to properly classify your shipment for transportation.

International to Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	N/A	Not dangerous goods	N/A	N/A.
TDG	N/A	Not dangerous goods	N/A	N/A.
IMO/IMDG	N/A	Not dangerous goods	N/A	N/A.
ΙΑΤΑ	N/A	Not dangerous goods	N/A	N/A.
*PG : Packing group				

## 15. Regulatory information

<u>US regulations</u> HCS Classification	When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.
U.S. Federal regulations	SARA Title III, Section 311/312 Classification Immediate (Acute) health hazard
	<b>SARA Title III, Section 313 - Supplier Notification</b> This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
	No chemicals present above the <i>de minimus</i> limit.
	CERCLA RQ: None
	SARA Section 302 Extremely Hazardous Substances None required.
State regulations	Massachusetts RTK Substances None
	New Jersey RTK Hazardous Substances None
	Pennsylvania RTK Hazardous Substances Diethylene Glycol (CAS No. 111-46-6; ETHANOL, 2,2-OXYBIS-)
	<b>California Prop. 65:</b> WARNING: This product contains the following chemical(s) known to the State of California to cause cancer: None
	<b>California Prop. 65:</b> WARNING: This product contains the following chemical(s) known to the State of California to be a reproductive toxin: None
International regulation Chemical inventories	United States inventory (TSCA 8b) - All components are listed or exempted.
16. Other info	ormation

Hazardous Material	Health: 1
Information System III	Flammability: 1
(U.S.A.)	Physical hazards: 0
	Personal Protection: X

Caution: HMIS<sup>®</sup> ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program.

Prepared by	Polyset Company, Inc.
Date of issue	June 29, 2015
Date of printing	June 29, 2015

#### Notice to reader

The information provided herein was believed by Polyset Company, Inc. ("Polyset") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Polyset are subject to Polyset's terms and conditions of sale. POLYSET MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY POLYSET, except that the product shall conform to Polyset's specifications. Nothing contained herein constitutes an offer for the sale of any product.



# **Safety Data Sheet**

## 1. Product and company identification

Product Name	Ply-Krete <sup>®</sup> FS - Part B	
Internal Code(s)	261120; 261160; 261161; 261162; 261164; 261171	
Product Type	Aromatic MDI Isocyanate	
Product Use	Two-Component Elastomeric Concrete	
Manufacturer/Supplier	Polyset Company, Inc. P.O. Box 111 65 Hudson Avenue Mechanicville, NY 12118 U.S.A.	www.polyset.com info@polyset.com
Revision Date	24-JUN-2015	
Telephone	For 24-Hour Emergency Respo Call ChemTel: (800) 255-3924 (U +1-813-248-0585	.S./Canada)
	For Other Product or Technical Call Polyset Company, Inc.: (518)	

## 2. Hazards identification

Product Form Dark Amber Liquid

**OSHA/HCS status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard Category	Acute Toxicity	4	Acute Toxicity (Inhalation – Mist)
Classification:	Skin Corrosion / Irritation	2	Skin Irritant
	Eye Damage / Irritation	2B	Mildly Irritating to Eyes
	Respiratory Sensitizer	1	Respiratory Sensitizer
	Skin Sensitizer	1B	Low to Moderate Frequency Skin Sensitizer
	Carcinogenicity	2	Suspected Human Carcinogen
	Specific Target Organ Toxicity –	3	Transient Target Organ Effects (Irritating to
	Single Exposure		Respiratory System)
	Specific Target Organ Toxicity –	2	Potential to be Harmful to Human Health
	Repeated/Prolonged Exposure		Following Repeated/Prolonged Use (Inhalation)

GHS Pictogram(s):



Signal Word:

DANGER

**Hazard Statement** 

tatement:	H320	Causes eye irritation.
	H315	Causes skin irritation.
	H332	Harmful if inhaled.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H317	May cause an allergic skin reaction.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	H373	May cause damage to organs (Olfactory organs) through prolonged or repeated exposure (inhalation)

#### **Precautionary Statements:**

Trecautionally State		
Prevention:	P280	Wear protective gloves / protective clothing / eye protection / face
		protection.
	P271	Use only outdoors or in a well-ventilated area.
	P260	Do not breathe mist / vapors.
	P201	Obtain special instructions before use.
	P261	Avoid breathing mist.
	P202	Do not handle until all safety precautions have been read and understood.
	P284	(In case of inadequate ventilation) wear respiratory protection.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P264	Wash hands and exposed skin thoroughly after handling.
Response:	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
•	P305 + P351 +	IF IN EYES: Rinse cautiously with water for several minutes.
	P338	Remove contact lenses, if present and easy to do. Continue
		Rinsing.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for
		breathing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P314	Get medical advice/attention if you feel unwell.
	P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists, Get medical advice/attention.
Storage:	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
Disposal:	P501	Dispose of contents/container to hazardous or chemical waste
		disposal facility in accordance with all local/national/international regulations.

#### Hazards not otherwise classified:

None known.

#### Supplemental Label Information:

Contains isocyanates. Inhalation of isocyanate mists or vapors may cause respiratory irritation, breathlessness, chest discomfort and reduced pulmonary function. Overexposure well above the PEL may result in bronchitis, bronchial spasms and pulmonary edema. Long-term exposure to isocyanates has been reported to cause lung damage, including reduced lung function which may be permanent. Acute or chronic overexposure to isocyanates may cause sensitization in some individuals, resulting in allergic respiratory reactions including wheezing, shortness of breath and difficulty breathing. Animal tests indicate that skin contact may play a role in causing respiratory sensitization.

## 3. Composition/Information on ingredients

Ingredient name	CAS number	<u>WT %</u>
Polymeric MDI	9016-87-9	50.0 - 75.0%
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	25.0 – 50.0%
Methylenediphenyl diisocyanate	26447-40-5	1.0 – 7.0%

## 4. First aid measures

#### Eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

Skin contact	Remove contaminated clothing. Wash affected areas thoroughly with soap and
	water. If irritation develops, seek medical attention.
Inhalation	Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.
Ingestion	Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.
Other Hazards	Symptoms can appear later. Isocyante respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.
Notes to physician	Specific antidotes or neutralizers to isocyanates do not exist. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Symptoms can appear later.
Potential acute health effe	
	Of moderate toxicity after short-term inhalation.
Ingestion	Virtually nontoxic after a single ingestion.
Skin	Virtually nontoxic after a single skin contact. Skin contact may cause irritation. Sensitization after skin contact is possible.
Eyes	Eye contact causes irritation.
<u>Potential chronic health e</u> Chronic effects	ffects Repeated exposure to the substance by dermal administration leads to effects similar to those found after single exposure. Repeated exposure to the substance by inhalative administration leads to effects similar to those found after single exposure. Repeated exposure to the substance by oral administration leads to effects similar to those found after single exposure.
Carcinogenicity	This product contains MDI, which is considered to have a possible carcinogenic effect in animal tests. However, the relevance of this result for humans is unclear.
Developmental effects	The substance (MDI) did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.
Fertility effects	See "Developmental effects."
Target organs	Eye, Skin, Respiratory Tract.
<u>Over-exposure signs/sym</u> Inhalation	<u>ptoms</u> Irritation of respiratory tract; Shortness of breath.
Ingestion	Irritation, nausea
Skin	Irritation, redness, itching, swelling.
Eyes	Irritation, redness, tearing.
Medical conditions aggravated by over-exposure	The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be

with respiratory function tests (FEV, FVC as a minimum) are suggested. An animal study indicated that MDI may induce respiratory hypersensitivity following dermal exposure. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

Flammability properties of the product	Flash Point: 220°C (428°F) Flash Point Method Used: Open cup Flammable Limits in Air (Lower - % by volume): Not Determined Flammable Limits in Air (Upper - % by volume): Not Determined	
Extinguishing media Suitable	Water spray, dry extinguishing media, carbon dioxide, foam	
Not suitable	None.	
Special exposure hazards	Isocyanates slowly react with water to release carbon dioxide gas.	
Hazardous combustion products	Nitrous gases, fumes/smoke, isocyanate, vapor.	
Unusual Fire and Explosion Hazards	Sealed, fire-exposed containers may build up dangerous pressure, potentially resulting in explosive rupture.	
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment, including self-contained breathing apparatus and turn-out gear.	

## 6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Clear area. Ensure adequate ventilation. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Spill Response	Dike spillage. For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. For large amounts: If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal. For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes

# 7. Handling and storage

Handling	Put on appropriate personal protective equipment when handling (Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. If bulging of drum occurs, transfer to well-ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.
Storage	Store in accordance with all local and government regulations. Keep in the original container or an approved alternative made from a compatible material, kept tightly sealed when not in use. Formation of CO2 and build up of pressure possible if moisture is introduced. Keep container tightly closed and in a well-ventilated place. Outage of containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture. Recommended storage temperature: 59 - 95°F (15 - 35°C).

# 8. Exposure controls/personal protection

CAS			Exposure Limits					
Number	Chemical Identity	ACO	ACGIH		OSHA			
Number		TWA	STEL	PEL	STEL	Other		
9016-87-9	-87-9 Polymeric MDI		N.E.	0.2 mg/m3 Ceiling	N.E.	N.E.		
101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)	0.005 ppm	N.E.	0.2 mg/m3 Ceiling	N.E.	N.E.		
26447-40-5	MDI Mixed Isomers	N.E.	N.E.	N.E.	N.E.	N.E.		

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.	
Engineering measures	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated equipment or clothing should be cleaned after each use or disposed of. Ensure that eyewash stations and safety showers are located in the work area.	
Respiratory	Use a properly fitted, air-purifying or air-supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.	
Eyes	Chemical splash goggles are recommended. Wear face shield if splashing hazard exists.	
Skin	Chemical resistant protective gloves are required. Suitable materials include: chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton). Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	

## 9. Physical and chemical properties

Form	Liquid
Color	Dark Amber
рН	Not applicable
Boiling point	> 200°C (> 392°F)
Freezing Point	< 3°C (< 38°F)
Specific gravity	1.23
Vapor pressure	0.00001 mmHg (at 25°C)
Odor threshold	Slight, aromatic odor
Solubility in water	Not applicable; Reacts with water
Evaporation rate	Not Determined
Vapor density	Not Determined

## 10. Stability and reactivity

Stability The product is stable when properly stored and handled. Conditions to avoid Avoid contact with water or alcohols in sealed containers. Risk of bursting. Reactive or incompatible with the following materials: water, alcohols, strong Materials to avoid bases, substances/products that react with isocyanates. Reacts with water, with formation of carbon dioxide, Risk of bursting, Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction. Risk of violent reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength. Other hazards Thermal decomposition at temperatures > 260°C. Decomposition products may include the following materials: carbon monoxide, Hazardous decomposition products hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors

## **11. Toxicological information**

#### Acute toxicity

MDI (CAS # 101-68-8) LD50 Oral LC50 Inhalation LD50 Dermal 
 Rat
 > 2,

 Rat
 2.0

 Rabbit
 >9,4

> 2,000 mg/kg 2.0 mg/L (aerosol) >9,400 mg/kg

#### **Carcinogenicity Classification**

Diphenylmethane-4,4'-diisocyanate (MDI): Indication of possible carcinogenic effect in animal tests. However, the relevance of this result for humans is unclear.

#### Ingredient name

Diphenylmethane-4,4'-diisocyanate (MDI) (CAS # 101-68-8):

500 janato (m	
IARC	Group 3 (Not classifiable as to carcinogenicity to humans)
NTP	Not listed
OSHA	Not regulated as a carcinogen
EU	Category 2 (H351: Suspected of causing cancer.)

## **12. Ecological information**

#### **Environmental effects**

#### Fish

Acute: static Brachydanio rerio/LC50 (24 h): > 500 mg/l Practically nontoxic. Information on: Diphenylmethane-4,4'-diisocyanate (MDI) Acute: OECD Guideline 203 static Brachydanio rerio/LC0 (96 h): > 1,000 mg/l

#### Aquatic invertebrates

Acute: Daphnia magna/EC50 (24 h): > 500 mg/l Practically nontoxic. Information on: Diphenylmethane-4,4'-diisocyanate (MDI) Acute: OECD Guideline 202, part 1 static Daphnia magna/EC50 (24 h): > 1,000 mg/l

#### Other adverse effects

Poorly biodegradable.

The product is unstable in water. The elimination data also refer to products of hydrolysis.

#### 13. Disposal considerations

Waste disposalThe generation of waste should be avoided or minimized wherever possible. Dispose<br/>of surplus and non-recyclable products via a licensed waste disposal contractor.<br/>Disposal of this product, solutions and any by-products should at all times comply with<br/>the requirements of environmental protection and waste disposal legislation and any<br/>regional local authority requirements. Avoid dispersal of spilled material and runoff and<br/>contact with soil, waterways, drains and sewers.

## 14. Transport information

The data provided in this section is for information only and may not be specific to each package size or mode of transport. Apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations					
Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)	
CFR	N/A	Not dangerous goods	N/A	N/A.	
TDG	N/A	Not dangerous goods	N/A	N/A.	
IMO/IMDG	N/A	Not dangerous goods	N/A	N/A.	
ΙΑΤΑ	N/A	Not dangerous goods	N/A	N/A.	

\*PG : Packing group

## 15. Regulatory information

#### US regulations HCS Classification

When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

U.S. Federal regulations	SARA Title III, Section 311/312 Classification Immediate (Acute) health hazard Delayed (Chronic) health hazard
	<b>SARA Title III, Section 313 - Supplier Notification</b> This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
	Diphenylmethane-4,4'-diisocyanate; CAS # 101-68-8; Diisocyanates Category (N120) Polymeric MDI; CAS # 9016-87-9; Diisocyanates Category (N120)
	CERCLA RQ: Diphenylmethane-4,4'-diisocyanate (MDI) (CAS # 101-68-8): 5,000 Lbs. Polymeric MDI (CAS # 9016-87-9): 5,000 Lbs.
	SARA Section 302 Extremely Hazardous Substances None required.
State regulations	Massachusetts RTK Substances Diphenylmethane-4,4'-diisocyanate (MDI) (CAS # 101-68-8) Polymeric MDI (CAS # 9016-87-9)

#### New Jersey RTK Hazardous Substances

Diphenylmethane-4,4'-diisocyanate (MDI) (CAS # 101-68-8) Polymeric MDI (CAS # 9016-87-9)

#### Pennsylvania RTK Hazardous Substances

Diphenylmethane-4,4'-diisocyanate (MDI) (CAS # 101-68-8) Polymeric MDI (CAS # 9016-87-9)

**California Prop. 65:** WARNING: This product contains the following chemical(s) known to the State of California to cause cancer: None

**California Prop. 65:** WARNING: This product contains the following chemical(s) known to the State of California to be a reproductive toxin: None

#### International regulations

Chemical inventories

United States inventory (TSCA 8b) - All components are listed or exempted.

### 16. Other information

Hazardous Material	Health: 2
Information System III	Flammability: 1
(U.S.A.)	Physical hazards: 1
	Personal Protection: X

Caution: HMIS<sup>®</sup> ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program.

Prepared by	Polyset Company, Inc.
Date of issue	June 24, 2015
Date of printing	June 24, 2015

#### Notice to reader

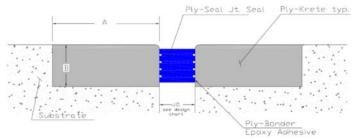
The information provided herein was believed by Polyset Company, Inc. ("Polyset") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Polyset are subject to Polyset's terms and conditions of sale. POLYSET MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY POLYSET, except that the product shall conform to Polyset's specifications. Nothing contained herein constitutes an offer for the sale of any product.



## Expansion Joint Systems for PERFORMANCE

# **Ply-Krete® FS**

Ply-Krete<sup>®</sup> FS is fast-setting, low-viscosity, а two-component 100% solid, modified polyurethane elastomeric concrete. It is designed as an expansion joint header to preserve and protect concrete decks and substructures by preventing water absorption and minimizing chloride intrusion. Ply-Krete<sup>®</sup> FS is a fast-setting **Ply-Krete<sup>®</sup>** elastomeric concrete, allowing traffic to return in as little as two hours.



#### **Key Features**

- Flexible, but tough
- High abrasion resistance
- Easy mixing and fast setting
- Excellent impact resistance
- Excellent thermal shock resistance
- Very good solvent and chemical resistance
- Ideal for quick repairs to expansion joints
- Excellent adhesion to various substrates
- Resistant to UV and ozone exposure
- Resistant to freeze-thaw changes
- Economical with high quality

#### **Other Applications**

- Pothole patching material in concrete
- Repairing control joints in concrete decks and roadways
- Control joints in warehouse floors

**Shelf Life**: One year in the original, unopened containers

Storage: Store between 65-90°F

## **Technical Bulletin**

#### Physical Data Typical properties, not intended for specifications

Appearance @ 25°C						
	Part	"A"	Part "B"		Mixed	
Packaging	1 C	an	1 Can V		With 1 Bag Agg	
Color	Bla	ck	Lt. Brown		Black	
Viscosity, cps	550 :	± 25	250 ± 50		-	
Wt./gal., lb	8.1 ±	0.1	10.2 ± 0.1		-	
Ratio & Cure						
Mix Ratio	2 Part	"A"	1 Part "B"		By Volume	
	100 "/	Α"	63 "B"		By Weight	
Mix A	& B well,	then a	dd supplied ag	ggre	egate	
Cure	G	Gel Time @ 25°C		8 -12 Min.		
Initial Cure	2 Hrs @	Hrs @ 25°C With		oplied Aggregate		
Properties w	ith Aggro	egate	(Aggregate Typ	be A	ffects Results)	
Compressive Str	ength, psi	3000 Min.			ASTM C579	
Brittleness ± 1 f	t-lb	7 ft-lb Min.		Ball Drop		
Properties w	ith Binde	er Onl	У			
Tensile Strength, psi		1650 ± 200		ASTM D638		
Tear Strength, p	li	150 ± 25			ASTM D624	
Shore D Hardnes	SS		45 ± 5	ASTM D2240		
Bond Strength To Wet Concrete		2	450 psi		Tex 618-J	

Packaging: Standard stock kits are packed in 0.52 cu. ft. kits. Larger size packaging is available upon request.

For proper installation instructions please, refer to the "Ply-Krete<sup>®</sup> Installation Instructions" Technical Bulletin. For health and safety information, please refer to the MSDS.

PC2611

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2018 Polyset Company, Inc. All rights reserved. Revised 8/18



# **Safety Data Sheet**

## 1. Product and company identification

Product Name	Ply-Primer – Part A	
Internal Code(s)	260910; 260914; 260962	
Product Type	Epoxy Resin	
Product Use	Civil Engineering Resin System	
Manufacturer/Supplier	Polyset Company, Inc. P.O. Box 111 65 Hudson Avenue Mechanicville, NY 12118 U.S.A.	www.polyset.com info@polyset.com
Revision Date	4-AUG-2015	
Telephone	For 24-Hour Emergency Response Information Call ChemTel: (800) 255-3924 (U.S./Canada) +1-813-248-0585 (International)	
	For Other Product or Technical Information	

Call Polyset Company, Inc.: (518) 664-6000

## 2. Hazards identification

Product Form Straw-colored liquid

**OSHA/HCS status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard Category	Skin Corrosion / Irritation	2	Skin Irritation
Classification:	Serious Eye Damage / Eye Irritation		Eye Irritation - Reversible effects on the eye.
	Skin Sensitization	1	Skin Sensitizer
	Germ Cell Mutagenicity	2	May induce heritable mutations in germ cells
	Carcinogenicity	2	Suspected human carcinogen
	Specific Target Organ Toxicity		Transient target organ effects - Repiratory
	(Single Exposure)		Tract Irritation via inhalation
	Specific Target Organ Toxicity	1	Potential to produce significant toxicity in
	(Repeated Exposure)		humans following repeated exposure -
			Central Nervous System (CNS) via inhalation;
			Skin via skin contact

GHS Pictogram(s):



Signal Word:

DANGER

Hazard Statement:

H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H317	May cause an allergic skin reaction.	
H341	Suspected of causing genetic defects.	
H351	Suspected of causing cancer.	
H335	May cause respiratory irritation.	
H372	Causes damage to organs (central nervous system (CNS), skin) through prolonged or repeated exposure.	

#### **Precautionary Statements:**

Trecautionaly State	inents.	
Prevention:	P264	Wash hands and exposed skin thoroughly after handling.
	P280	Wear protective (permeation-resistant rubber) gloves / protective
		clothing / eye protection / face protection.
	P260	Do not breathe vapors.
	P272	Contaminated work clothing should not be allowed out of the
		workplace.
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and
		understood.
	P271	Use only outdoors or in a well-ventillated area.
	P270	Do not eat, drink, or smoke when using this product.
-	<b>D</b> 000 <b>D</b> 010	
Response:	P308 + P313	IF exposed or concerned: Get medical advice / attention.
	P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
	P333 + P313	If skin irritation or rash occurs: Get medical attention.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
		Remove contact lenses, if present and easy to do. Continue
		rinsing.
	P337 + P313	If eye irritation persists: Get medical attention.
	P304 + P340	<b>IF INHALED:</b> Remove person to fresh air and keep comfortable
		for breathing.
	P312	Call a POISON CENTER or doctor if you feel unwell.
04	<b>B</b> 400 <b>B</b> 000	
Storage:	P403 + P233	Store in a well-ventillated place. Keep container tightly closed.
	P405	Store locked up.
Disposal:	P501	Dispose of contents / container to a disposal facility in accordance
Diopooun		with all local / national / international regulations.

# 3. Composition/Information on ingredients

Ingredient name	CAS number	<u>WT %</u>
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	65 – 80%
9-Octadecenoic acid, 12-(2-oxiranylmethoxy)-, 1,2,3-propanetriyl ester, homopolymer	74398-71-3	15 – 25%
Oxirane, 2-(butoxymethyl)-	2426-08-6	5 – 10%

## 4. First aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept

low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Notes to physician** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

Flammability properties of the product	Flash Point: >93°C (>199.4°F) Flash Point Method Used: Pensky-Martens Closed Cup (ASTM D-93) Flammable Limits in Air (Lower - % by volume): Not determined Flammable Limits in Air (Upper - % by volume): Not determined	
Extinguishing media Suitable	Low Pressure Water Spray, Foam, Carbon Dioxide, Dry Chemical	
Not suitable	High-Pressure Water Spray (may spread burning material).	
Special exposure hazards	Wear self-contained breathing apparatus (SCBA) to protect from hazardous combustion products. Be aware of the explosive rupture potential of this product under fire and/or excessive heating conditions.	
Hazardous combustion products	Carbon Monoxide, Carbon Dioxide, Hydrocarbons, and other Aliphatic Fragments of uncertain composition.	
Unusual Fire and Explosion Hazards	The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.	
Special protective equipment &	Fire-fighters should wear appropriate protective equipment including self-contained breathing apparatus (SCBA).	
instructions for fire-fighters	Fight fire from safe distance and protected location. Avoid direct personal contact with liquid. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.	
	Prevent fire-fighting water from entering environment	

Prevent fire-fighting water from entering environment.

## 6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Spill Response	Clean up large spills with vacuum truck. Soak up small spills with absorbent material and place in labeled containers for recovery or disposal.

## 7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.
Storage	Keep in the original container or an approved alternative made from a compatible material, kept tightly sealed when not in use. Take measures to prevent the introduction of water or atmospheric moisture. Store at room temperature in a dry

place away from heat and direct sunlight. Store in accordance with all local and government regulations. Recommended storage temperature: 59 - 95°F (15 - 35°C).

## 8. Exposure controls/personal protection

CAS		Exposure Limits				
Number	Chemical Identity	ACGIH		OSHA		NIOSH
Number		TWA	STEL	PEL	STEL	REL
25068-38-6	4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	N.E.	N.E.	N.E.	N.E.	N.E.
74398-71-3	9-Octadecenoic acid, 12-(2-oxiranylmethoxy)-, 1,2,3-propanetriyl ester, homopolymer	N.E.	N.E.	N.E.	N.E.	N.E.
2426-08-6	Oxirane, 2-(butoxymethyl)-	3 ppm	N.E.	270 mg/m <sup>3</sup> 50 ppm TWA	N.E.	30 mg/m <sup>3</sup> 5.6 ppm Ceiling

**Recommended monitoring procedures** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

- **Hygiene measures** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are located in the work area.
- **Respiratory** Use a properly fitted, air-purifying or air-supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eyes Safety glasses with side-shields or chemical splash goggles are recommended.

SkinImpervious gloves should be used. Butyl rubber gloves are recommended.<br/>Personal protective equipment for the body should be selected based on the task<br/>being performed and the risks involved and should be approved by a specialist<br/>before handling this product.

## 9. Physical and chemical properties

Form Color pH Boiling point Freezing Point Specific gravity Odor threshold Solubility in water Evaporation rate Vapor density Liquid Straw-colored Not determined > 117.8°C (> 244°F) Not determined 1.10 Slight sweet-smelling odor Negligible Not Determined Not Determined

## 10. Stability and reactivity

Stability	The product is stable under normal conditions of storage and use.	
<b>Conditions to avoid</b> Excessive heat. Sparks, open flames, and other sources of ignition.		
Materials to avoid	Reactive or incompatible with the following materials: Strong oxidizers.	
Other hazards	Curing reaction may release significant heat when mixed with Part B	
Hazardous decomposition products	Decomposition products upon combustion may include the following materials: Carbon Monoxide, Carbon Dioxide.	

Rat

> 6.189 mg/kg (Acute Toxicity Estimate)

## 11. Toxicological information

LD50 Oral

### Acute toxicity

	LD50 Dermal LC50 Inhalation	Rabbit Rat	<ul> <li>&gt; 2,016 mg/kg (ATE)</li> <li>&gt; 20 mg/L vapors</li> </ul>
Skin Irritation	Rabbit, OECD Te	st Guideline	404, 24 Hrs.: Moderately irritating
Eye Irritation	Rabbit, Moderatel	y irritating	
Sensitization	Causes sensitizat	ion.	
	Skin sensitization Test Guideline 42	· · ·	n node assay (LLNA)):: positive (mouse, OECD
<u>Mutagenicity</u>	Suspected of causing	genetic def	ects.
Carcinogenicity Classifica	<u>ition</u>		

IARC Not listed NTP Not listed **OSHA** Not regulated as a carcinogen Not classified

## 12. Ecological information

#### **Environmental effects**

No known significant effects or critical hazards.

ΕU

Other adverse effects

No known significant effects or critical hazards.

## 13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

The data provided in this section is for information only and may not be specific to each package size or mode of transport. Apply the appropriate regulations to properly classify your shipment for transportation.

International t Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	N/A	Not dangerous goods	N/A	N/A.
TDG	N/A	Not dangerous goods	N/A	N/A.
IMO/IMDG	N/A	Not dangerous goods	N/A	N/A.
ΙΑΤΑ	N/A	Not dangerous goods	N/A	N/A.
*PG : Packing	group			

## 15. Regulatory information

.

. ..

• •

...

• •

#### US regulations **HCS Classification** When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200. **U.S. Federal** SARA Title III, Section 311/312 Classification regulations Acute (Immediate) Health Hazard SARA Title III, Section 313 - Supplier Notification This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372. No chemicals present above the *de minimus* limit. SARA Section 302 Extremely Hazardous Substances None required. State regulations Massachusetts RTK Substances 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer (CAS # 25068-38-6) Epichlorohydrin (CAS # 106-89-8); <0.05% Diglycidyl Ether (CAS # 2238-07-5); < 0.05% **New Jersey RTK Hazardous Substances** 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer (CAS # 25068-38-6) Pennsylvania RTK Hazardous Substances 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer (CAS # 25068-38-6) Epichlorohydrin (CAS # 106-89-8); <0.05% California Prop. 65: WARNING: This product contains the following chemical(s) known to the State of California to cause cancer: Epichlorohydrin (CAS # 106-89-8); <0.05% Phenyl Glycidyl Ether (CAS # 122-60-1); 0.3 - 2 ppm California Prop. 65: WARNING: This product contains the following chemical(s) known to the State of California to be a reproductive toxin: Epichlorohydrin (CAS # 106-89-8); <0.05%; Male Methanol (CAS # 65-56-1); < 1 ppm; Developmental International regulations **Chemical inventories** Australia inventory (AICS) - All components are listed or exempted. Canada inventory - All components are listed or exempted Japan inventory - All components are listed or exempted China inventory (IECSC) - All components are listed or exempted. Korea inventory - All components are listed or exempted. New Zealand Inventory (NZIoC) - All components are listed or exempted.

Philippines inventory (PICCS) - All components are listed or exempted. United States inventory (TSCA 8b) - All components are listed or exempted. Restriction of Hazardous Substances (RoHS) This product is RoHS compliant and does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) at levels greater than the maximum concentration values specified in Directive 2011/65/EU (dated 8 June, 2011) of the European Parliament and of the Council of the European Union.

## 16. Other information

Hazardous Material
Information System III
(U.S.A.)

Health: 2 Flammability: 1 Physical hazards: 0 Personal Protection: X

Caution: HMIS<sup>®</sup> ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program.

Prepared by	Polyset Company, Inc.
Date of issue	August 4, 2015
Date of printing	September 9, 2015

#### Notice to reader

The information provided herein was believed by Polyset Company, Inc. ("Polyset") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Polyset are subject to Polyset's terms and conditions of sale. POLYSET MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY POLYSET, except that the product shall conform to Polyset's specifications. Nothing contained herein constitutes an offer for the sale of any product.



# **Safety Data Sheet**

## 1. Product and company identification

Product Name	Ply-Primer – Part B	
Internal Code(s)	260920; 260924; 260962	
Product Type	Curing Agent for Epoxy Resin	
Product Use	Civil Engineering Resin System	
Manufacturer/Supplier	Polyset Company, Inc. P.O. Box 111 65 Hudson Avenue Mechanicville, NY 12118 U.S.A.	www.polyset.com info@polyset.com
Revision Date	8-MAR-2016	
Telephone	For 24-Hour Emergency Response Information Call ChemTel: (800) 255-3924 (U.S./Canada) +1-813-248-0585 (International)	
	For Other Product or Technical	Information

Call Polyset Company, Inc.: (518) 664-6000

## 2. Hazards identification

 Product Form
 Black liquid

 OSHA/HCS status
 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

 Hazard Category
 Acute Toxicity – Inhalation
 4
 Toxicity via inhalation of mists

 Classification:
 Skin Corrosion / Irritation
 1C
 Skin Corrosion: Sub-Category 1C

3	riouto romony minaration		
-	Skin Corrosion / Irritation	1C	Skin Corrosion; Sub-Category 1C
	Serious Eye Damage / Eye Irritation	1	Serious eye damage / irreversible effects on
			the eye
	Skin Sensitization	1	Skin Sensitizer
	Germ Cell Mutagenicity	1B	Regarded as inducing heritable mutations in
			germ cells
	Carcinogenicity	1A	Known to have carcinogenic potential
	Reproductive Toxicity	1B	Presumed human reproductive toxicant
	Specific Target Organ Toxicity	2	Presumed to have the potential to be harmful
	(Repeated Exposure)		to human health following repeated exposure.
	Hazardous to the Aquatic	1	Long-term (chronic) aquatic hazard.
	Environment – Long-Term (Chronic)		
	Hazard		

#### GHS Pictogram(s):



Signal Word:

#### DANGER

#### Hazard Statement:

H332	Harmful if Inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.

H373	May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure (by oral route of exposure).
H410	Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

,					
Prevention:	P260	Do not breathe dusts or mists.			
	P271	Use only outdoors or in a well-ventillated area.			
	P264	Wash hands and exposed skin thoroughly after handling.			
	P280	Wear protective (chemical-resistant impervious rubber) gloves /			
		protective clothing / eye protection / face protection.			
	P272	Contaminated work clothing should not be allowed out of the			
		workplace.			
	P201	Obtain special instructions before use.			
	P202	Do not handle until all safety precautions have been read and understood.			
	P273	Avoid release to the environment.			
_	<b>D</b> 004 <b>D</b> 040				
Response:	P304 + P340	<b>IF INHALED:</b> Remove person to fresh air and keep comfortable			
		for breathing.			
	P310	Immediately call a POISON CENTER / doctor / physician.			
	P301 + P330 + P331	<b>IF SWALLOWED:</b> Rinse mouth. Do NOT induce vomiting.			
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated			
		clothing. Rinse skin with plenty of water or shower.			
	P333 + P313	If skin irritation or rash occurs: Get medical advice / attention.			
	P363	Wash contaminated clothing before reuse.			
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.			
		Remove contact lenses, if present and easy to do. Continue			
		rinsing.			
	P308 + P313	If exposed or concerned: Get medical advice / attention.			
	P314	Get medical advice / attention if you feel unwell.			
	P391	Collect spillage.			
Storage:	P405	Store locked up.			
ugo,					
Disposal:	P501	Dispose of contents / container to a disposal facility in accordance with all local / national / international regulations.			

# 3. Composition/Information on ingredients

Ingredient name	CAS number	<u>WT %</u>
Coal Tar Pitch	65996-93-2	45.0 - 55.0%
Diethylenetriamine (DETA)	111-40-7	5.0 - 20.0%
Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7	5.0 - 20.0%
para-Nonylphenol	84852-15-3	5.0 – 15.0%
ATBN Polymer	68683-29-4	5.0 – 15.0%
n-Aminoethylpiperazine	140-31-8	0.3 – 1.0%

# 4. First aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or

	are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	If Swallowed, immediately call a POISON CENTER or doctor/physician. Never give anything by mouth to a victim who is unconscious or is having convulsions. Wash out mouth with water. Remove dentures, if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Application of corticosteroid cream has been effective in treating skin irritation.

# 5. Fire-fighting measures

Flammability properties of the product	Flash Point: >93°C (>200°F) Flash Point Method Used: Pensky-Martens Closed Cup (ASTM D-93) Flammable Limits in Air (Lower - % by volume): Not determined Flammable Limits in Air (Upper - % by volume): Not determined	
Extinguishing media Suitable	Alcohol-resistant Foam, Carbon Dioxide, Dry Chemical, Dry Sand	
Not suitable	High-Pressure Water Spray (may spread burning material).	
Special exposure hazards	Wear self-contained breathing apparatus (SCBA) to protect from hazardous combustion products. Be aware of the explosive rupture potential of sealed containers of this product under fire and/or excessive heating conditions.	
Hazardous combustion products	Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, Sulfur Oxides, Toxic fumes,	
Unusual Fire and Explosion Hazards	Sealed, fire-exposed containers may build up dangerous pressure, potentially resulting in explosive rupture. Keep sealed fire-exposed containers cool with water spray.	
Special protective equipment & instructions for fire-fighters	Fire-fighters should wear appropriate protective equipment Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products of combustion exists. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Prevent fire-fighting water from entering environment.	

## 6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Spill Response	Clean up large spills with vacuum truck. Soak up small spills with absorbent material and place in labeled containers for recovery or disposal.

## 7. Handling and storage

Handling
 Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.
 Storage
 Keep in the original container or an approved alternative made from a compatible material, kept tightly sealed when not in use. Take measures to prevent the introduction of water or atmospheric moisture. Store at room temperature in a dry place away from heat and direct sunlight. Store in accordance with all local and government regulations. Recommended storage temperature: 59 - 95°F (15 - 35°C).

## 8. Exposure controls/personal protection

CAS Number Chemical Identity		Exposure Limits				
		ACGIH		OSHA		NIOSH
Number		TWA	STEL	PEL	STEL	REL
65996-93-2	Coal Tar Pitch Coal tar pitch volatiles (benzene soluble fraction)	0.2 mg/m <sup>3</sup>	N.E.	0.2 mg/m <sup>3</sup>	N.E.	N.E.
111-40-7	Diethylenetriamine (DETA)	1 ppm	N.E.	1 ppm	N.E.	1 ppm
80-05-7	Phenol, 4,4'-(1-methylethylidene)bis-	N.E.	N.E.	N.E.	N.E.	N.E.
84852-15-3	para-Nonylphenol	N.E.	N.E.	N.E.	N.E.	N.E.
68683-29-4	ATBN Polymer	N.E.	N.E.	N.E.	N.E.	N.E.
140-31-8	n-Aminoethylpiperazine	N.E.	N.E.	N.E.	N.E.	N.E.

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.			
Engineering measures	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are located in the work area.			
Respiratory	Use a properly fitted, air-purifying or air-supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.			
Eyes	Chemical splash goggles and full face shield are recommended.			
Skin	Impervious gloves made of Neoprene, Butyl Rubber or Nitrile Rubber should be used. Wear additional protective clothing to prevent skin contact. This may include aprons, chemical resistant boots, and chemical resistant suits. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			

## 9. Physical and chemical properties

Form	Liquid
Color	Black
рН	Alkaline (pH > 7.0)

Boiling point	Not determined
Freezing Point	Not determined
Specific gravity	1.09
Vapor pressure	< 5.17 mmHg at 70 °F (21 °C)
Odor threshold	Tar and ammonia-like odor
Solubility in water	Slightly soluble. Reacts slowly with water to form ammonia.
Evaporation rate	Not Determined; anticipated to be slower than Butyl Acetate.
Vapor density	Not Determined; anticipated to be heavier than air (>1)

# 10. Stability and reactivity

Stability	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.		
Conditions to avoid	Sparks, open flames, and other sources of ignition. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.		
Materials to avoid	Reactive or incompatible with the following materials: Oxidizing agents. Reaction with peroxides may result in violent decomposition of peroxide, possibly creating an explosion. Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.) and mineral acids. Nitrous acid and other nitrosating agents. Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Heat and/or water and atmospheric moisture will degrade product quality.		
Other hazards	Curing reaction may release significant heat when mixed with Part A.		
Hazardous decomposition products	Decomposition products upon combustion may include the following materials: Nitrogen Oxides, Nitric Acid, Ammonia, Carbon Dioxide; Carbon Monoxide, Nitrosamines.		

# 11. Toxicological information

Acute toxicity	LD50 Oral LD50 Derma LC50 Inhala		Rat Rabbit Rat	2200 mg/kg (Acute Toxicity Estimate) 2127 mg/kg (Acute Toxicity Estimate) 1.36 mg/L (aerosol/mist); (ATE)	
Skin Irritation	Prolonged e Severe skin		y cause de	struction of skin tissue.	
Eye Irritation	Severe eye i	irritation.			
Sensitization	May cause sensitization by skin contact.				
Mutagenicity	There is evidence of mutagenic potential.				
<b>ReproductiveToxicity</b>	May damage fertility or the unborn child.				
Carcinogenicity Classification	ssification				
	IARCGroup 1: Human Carcinogen (Coal tar pitch)NTPKnown Human Carcinogen (Coal tar pitch)OSHANot regulated as a carcinogenACGIHA1 Known human carcinogen (Coal tar pitch)				

#### **12. Ecological information**

#### **Component Aquatic Eco-toxicity**

para-Nonylphenol (CAS # 84852-15-3)

#### Fish

Fathead Minnow: Acute LC50: 0.1383 mg/L (96 Hours) Rainbow Trout, Donaldson Trout: Acute LC50: 0.14 - 0.23 mg/L (96 Hours)

Daphnia

Acute EC50: 0.035 mg/L (48 Hours)

#### Algae

Acute LC50: 0.0563 mg/L (72 Hours)

#### **Environmental effects**

Expected to be very toxic to aquatic organisms. May cause long term adverse effects in the environment. Partially biodegradable. This product has potential to bioaccumulate.

## 13. Disposal considerations

#### Waste disposal

sal The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

The data provided in this section is for information only and may not be specific to each package size or mode of transport. Apply the appropriate regulations to properly classify your shipment for transportation.

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	UN3267	Corrosive Liquid, Basic, Organic, N.O.S. (Diethylenetriamine, para-Nonylphenol)	8, PGIII	292 Lbs.**
TDG	UN3267	Corrosive Liquid, Basic, Organic, N.O.S. (Diethylenetriamine, para-Nonylphenol) Marine Pollutant	8, PGIII	292 Lbs.**
IMO/IMDG	UN3267	Corrosive Liquid, Basic, Organic, N.O.S. (Diethylenetriamine, para-Nonylphenol) Marine Pollutant	8, PGIII	292 Lbs.**
ΙΑΤΑ	UN3267	Corrosive Liquid, Basic, Organic, N.O.S. (Diethylenetriamine, para-Nonylphenol) Marine Pollutant	8, PGIII	292 Lbs.**

#### \*PG : Packing group

**LIMITED QUANTITIES:** When limited quantities of this product are offered for transportation, except by air, and packaged in proper combination packages with individual inner containers of less than 5.0 L (1.3 gallons) net capacity each, this product may ship as LIMITED QUANTITY. Placarding rules may still apply. The IMDG Code does not require Limited Quantity packages to be identified or labeled as Marine Pollutants when shipped by sea/ocean.

\*\***REPORTABLE QUANTITY (RQ):** Individiual containers of this product that exceed the RQ of 292 Lbs. (113.4 kg) net weight, contain the following substances above their individual RQ limits: Benzo(b)fluoranthene (CAS # 205-99-2); Substance RQ = 1 Lb.

Benzo(a)pyrene (CAS # 50-32-8); Substance RQ = 1 Lb.

# 15. Regulatory information

#### US regulations

<u>US regulations</u> HCS Classification	When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.
U.S. Federal regulations	SARA Title III, Section 311/312 Classification Immediate (Acute) health hazard Long-Term (Chronic) health hazard
	<b>SARA Title III, Section 313 - Supplier Notification</b> This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
	Phenol, 4,4'-(1-methylethylidene)bis- (CAS # 80-05-7) Polycyclic Aromatic Hydrocarbons (PAC's) (Category N590); 2.4 – 4.2 wt% Phenanthrene (CAS # 85-01-8); 0.5 – 1.5 wt% Naphthalene (CAS # 91-20-3); 0.4 – 0.7 wt%
	SARA Section 302 Extremely Hazardous Substances Pyrene (CAS # 129-00-0); 0.5 – 1.0 wt%.
State regulations	Massachusetts RTK Substances Coal Tar Pitch (CAS # 65996-93-2) Diethylenetriamine (CAS # 111-40-0) Phenol, 4,4'-(1-methylethylidene)bis- (CAS # 80-05-7) Phenanthrene (CAS # 85-01-8) Naphthalene (CAS # 91-20-3)
	New Jersey RTK Hazardous Substances Coal Tar Pitch (CAS # 65996-93-2) Diethylenetriamine (CAS # 111-40-0) Phenol, 4,4'-(1-methylethylidene)bis- (CAS # 80-05-7) Phenanthrene (CAS # 85-01-8) Naphthalene (CAS # 91-20-3)
	Pennsylvania RTK Hazardous Substances Coal Tar Pitch (CAS # 65996-93-2) Diethylenetriamine (CAS # 111-40-0) Phenol, 4,4'-(1-methylethylidene)bis- (CAS # 80-05-7) Phenanthrene (CAS # 85-01-8) Naphthalene (CAS # 91-20-3)
	California Prop. 65: WARNING: This product contains the following chemical(s) known to the State of California to cause cancer:
	Benzo(b)fluoranthene (CAS # 205-99-2) Benzo(a)pyrene (CAS # 50-32-8) Dibenz(a,h)anthracene (CAS # 53-70-3) Benz(a)anthracene (CAS # 56-55-3) Naphthalene (CAS # 91-20-3) Indeno(1,2,3-cd)pyrene (CAS # 193-39-5) Chrysene (CAS # 218-01-9)
	<b>California Prop. 65:</b> WARNING: This product contains the following chemical(s) known to the State of California to be a reproductive toxin:

None known.

#### International regulations

Chemical inventories	Europe inventory - All components are listed or exempted. Australia inventory (AICS) - All components are listed or exempted. Canada inventory - All components are listed or exempted. Japan inventory - Not on inventory. China inventory (IECSC) - All components are listed or exempted. Korea inventory - All components are listed or exempted. Philippines inventory (PICCS) - All components are listed or exempted. United States inventory (TSCA 8b) - All components are listed or exempted.
Canada WHMIS Hazard Classification	Class D-2A: Very Toxic Material Causing Other Toxic Effects Class D-2B: Toxic Material Causing Other Toxic Effects Class E: Corrosive Material
Restriction of Hazardous Substances (RoHS)	This product is RoHS compliant and does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) at levels greater than the maximum concentration values specified in Directive 2011/65/EU (dated 8 June, 2011) of the European Parliament and of the Council of the European Union.

## 16. Other information

Hazardous Material	Health: 3
Information System III	Flammability: 1
(U.S.A.)	Physical hazards: 0
	Personal Protection: X

Caution: HMIS<sup>®</sup> ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program.

Prepared by	Polyset Company, Inc.
Date of issue	March 8, 2016
Date of printing	March 8, 2016

#### Notice to reader

The information provided herein was believed by Polyset Company, Inc. ("Polyset") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Polyset are subject to Polyset's terms and conditions of sale. POLYSET MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY POLYSET, except that the product shall conform to Polyset's specifications. Nothing contained herein constitutes an offer for the sale of any product.

# Polyset

# **Ply-Primer**

**Ply-Primer** is a unique two-component, low-viscosity modified elastomeric priming agent developed for use with the **Ply-Krete**<sup>®</sup> brands of elastomeric concrete. **Ply-Primer** has excellent adhesion to steel, concrete, and asphalt. The lower viscosity allows for a more user-friendly application with better wetting properties.

#### **Key Features**

- Excellent adhesion to various substrates
- Excellent thermal shock resistance
- Excellent moisture resistance
- Flexible and resilient
- Resistant to freeze-thaw changes
- Very good solvent and chemical resistance

#### Mixing

It is recommended to wear protective gloves and splash-resistant glasses. If not using the full unit, stir the individual components prior to mixing together. Mix according to specified mixing ratio with low-speed drill for 60-90 seconds.

#### Application

For best results, sandblast all surfaces to receive the **Ply-Primer**. New concrete should cure 80% of designed strength prior to application. Steel surfaces should be sandblasted to SSPC-10, near white finish, immediately before the application of the **Ply-Primer**. Apply by brush or spray at a minimum of 20 mils thick (80 sq. ft./gal); avoid puddling.

**Shelf Life:** Two years in the original, unopened containers. Packed in 1 gallon cans; 3 units per case.

Storage: Store between 60 -100°F; keep from freezing.

## Physical Data

Appearance @ 25°C						
	Part "	۹"	Part "B"		Mixed	
Packaging	3/4 Gal		3/4 Gal		1.5 Gal	
Color	Straw	I	Black		Black	
Viscosity, cps	700 ± 2	00	8000 ± 1000		-	
Wt./gal., lb	9.2 ± 0	.2	9.0 ± 0.2		-	
Yield		1	20 sq. ft/ 1.5 Ga	l Ur	nit	
Ratio & Cure						
Mix Ratio	1 Part '	'A"	1 Part "B"		By Volume	
	100 "/	Α″	98 "B"		By Weight	
Cure	G	Gel Time @ 25°C			15-25 Min.	
Contact Time	Plac	ement	of Ply-Krete <sup>®</sup> ; 0	)-3 I	Hrs @ 25°C	
Strengths with	Binder C	only				
Percent Elongatio	n	45 ± 10			ASTM D638	
Tensile Strength, psi		2,100 ± 200		ASTM D638		
Tear Strength, pli		375 ± 25		ASTM D624		
Shore D Hardness		65 ± 5		ASTM D2240		
Bond Strength To Dry Concrete To Wet Concrete		500 psi 300 psi		Tex 618-J		

For additional installation instructions, please refer to the "Ply-Krete<sup>®</sup> Installation Instructions Technical Bulletin". For health and safety information, please refer to the MSDS.

#### KEEP OUT OF REACH OF CHILDREN

PC2609

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2016 Polyset Company, Inc. All rights reserved. Revised 8/16.

## **Technical Bulletin**