



# What is a pest?

Bacteria, viruses (germs)

Fungi, plant diseases

Weeds

Insects, mites, etc.

**Vertebrates** 





Starling



Mice



COVID-19



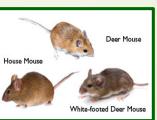
Potato Blight



**Crab Grass** 



**Carpenter Ants** 



Squirrels



Skunks





Before using lethal methods to control pest wildlife contact the Maine Warden Service or District Wildlife Biologist



## What is a pesticide?

Examples

Herbicides

Insecticides

**Fungicides** 

Rodenticides

**Bactericides** 

Virucides

**Miticides** 

Slimicides

Plant growth regulators



# What is a pesticide?

- Any substance or mixture of substances intended for:
  - preventing,
  - destroying,
  - -repelling, or
  - mitigating any pest
- And any plant regulator, defoliant or desiccant.
  - Does not include fertilizers or nutrients
  - Does not include beneficial organisms
  - Does not include traps or mechanical means

# These are pesticides

- Disinfectants (peroxides & bleaches)
- Herbicides & Growth Regulators

Rat & mouse baits

**V**Fungicides



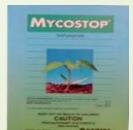














No endorsement intended or implied



# These are pesticides

Insecticides

Botanicals

Biological controls













No endorsement intended or implied

# These are pesticides

Deer and rabbit repellents





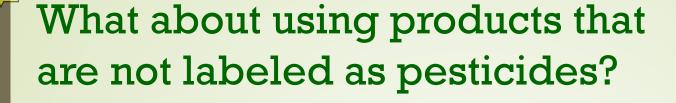
Insect repellents











- Home chemistry is not recommended by the BPC
- Many of the materials used seem "safe" because we eat them or use them on our skin
- Exposure routes may be different
- What we eat may not be safe to breathe

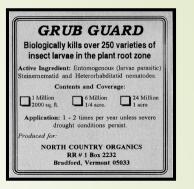




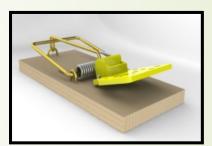


## What products are **NOT** pesticides?

Insect parasitic nematodes



Rodent or insect traps





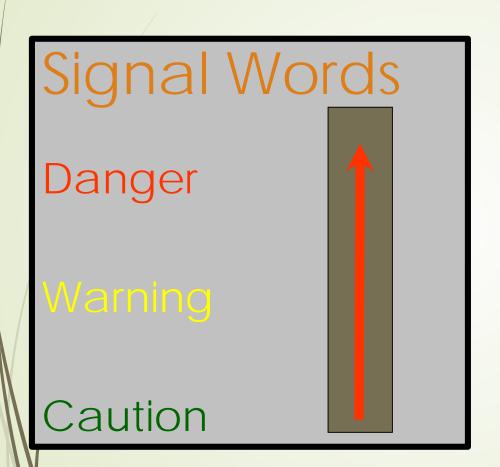
→ Beneficial insects or mites

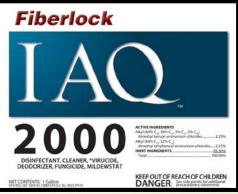


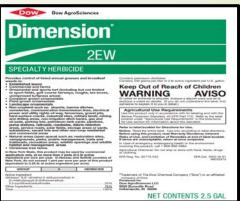


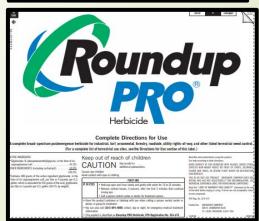
No endorsement intended or implied

#### One way to quickly assess the acute risk?









No endorsement intended or implied

#### SIGNAL WORDS

CAUTION Slightly Toxic WARNING – Moderately Toxic

DANGER – Highly Toxic





#### Complete Directions for Use

A complete broad-spectrum postemergen, a herbicide for industrial, turf, ornamental, forestry, roadside, utility rights-of-way, and other listed terrestrial weed control. (For a complete list of terrestrial use sites, see the Directions for Use section of this label.)

#### CTIVE INGREDIENT.

\*Glyphosate, N-(phosphonomethy()glycing, in the form of its ITHER INGREDIENTS (including surfactant): 59.0%

'Contains 480 grams of the active ingredient glyphosate, in the form of its iscorcovlamine salt, per liter or 4 pounds per U.S. gallon, which is equivalent to 356 grams of the acid, glyphosate. per liter or 3 pounds per U.S. gallon (30.4% by weight).

#### Keep out of reach of children

CAUTION See inside for additional precautions.

Causes eve initation: Avaid contact with eyes or clothing:

#### FIRST AID

- IF IN EYES Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
  - Remove contact lenses. If present, after the first 5 minutes then continue. rinsing eye.
  - Call a poison control center or ductor for treatment advice.
- Have the product container or labeling with you when calling a poison control center or ductor, or going for treatment.
- You can also call (314) 694-4000, collect, day or night, for emergency medical treatment.
- This product is identified as Roundup PRO Herbicide, EPA Registration No. 524-475.

Read the entire label before using this product.

Use only according to label directions.

AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, GREEN STEWS EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE, PLANTS AND TREES, AS SEVERE PLANT INJURY OR DESTRUCTION

THIS IS AN END-USE PRODUCT. MONSANTO COMPANY DOES N

of the label before buying or using. If forms are not acceptable, return at once propered.

EPA Box, No. 524-475

Packed for MONSAWTO COMPANY 800 N. LINDBERCH BLVD.

ST. LOUIS, MISSOURI, 63167 USA.

#### How 'Risky' is the Product?

- Human Risk = toxicity times exposure
  - 'Signal Word' indicates toxicity
  - Exposure varies with 'Formulation' and application method
- Environmental Risk (to bees, water, etc)
   varies with formulation, chemical
   composition and application method

## Pesticide Registration

To be legal for use in Maine, all pesticides must be registered by both:

►EPA\*

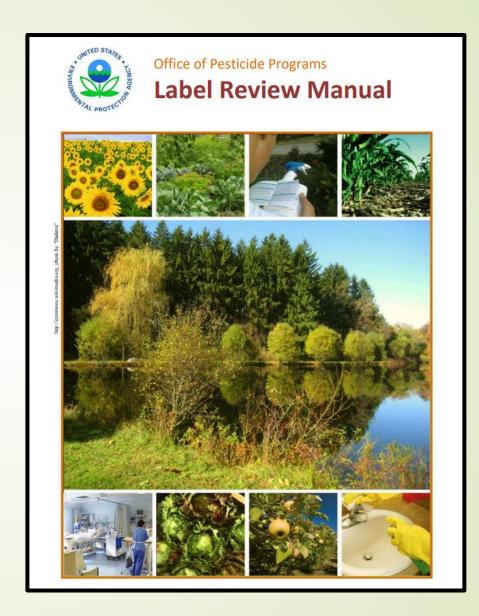


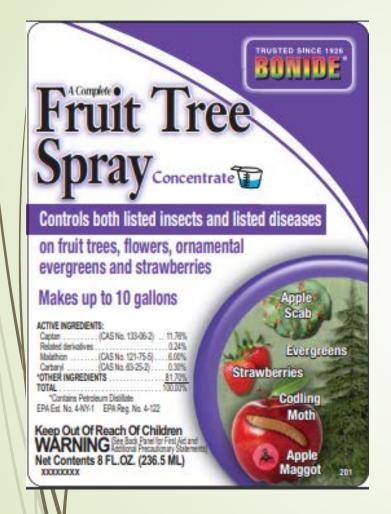




\*Some "reduced risk" pesticides have been deregulated by the EPA

- The first set of numbers is a EPA Reg # is the manufacture
- The second set of numbers is the product identification number.
- If there is a third set of numbers, it is the distributor's company number









Controls Both Listed Insects & Listed Diseases On...

- Fruit Trees
- Flowers
- Ornamental Evergreens
- Strawberries

#### ACTIVE INGREDIENTS

Captan	(CAS No. 133-06-2).	11.76%		
Related derivatives		0.24%		
Malathion	(CAS No. 121-75-5).	6.00%		
Carbaryl	(CAS No. 63-25-2)	0.30%		
*OTHER INGREDIENTS 81.70%				
TOTAL		100.00%		

\*Contains Petroleum Distillate 

#### KEEP OUT OF REACH OF CHILDREN WARNING

(See back panel for First Aid and additional Precautionary Statements) 85202

EPA Reg # 4-122

EPA Reg # 4-122-7138



#### Pesticide Classifications

 General Use – Lower risk, available over-the-counter



 Restricted Use – Higher risk, only available at licensed dealerships for purchase by licensed applicators

State Restricted - Aquatic Herbicide Pesticides







No endorsement intended or implied



## Pesticide Registration - Pesticide Labeling



- Labels are legal documents that provide directions for pesticide mixing, application, storage & disposal
- Users must comply with all instructions on the pesticide label & labeling
- ► FIFRA 2ee

#### Read the label!

- Can it be used in/on school property?
- Signal word (Caution, Warning or Danger)
- Precautionary statements
- ► PPE requirements
- Re-entry statements
- Environmental hazards
- Application restrictions
- Mode of action





The issue; the soccer field has a crab grass problem.



You contact a turf management company and they make a proposal to treat the field with a herbicide.



The company proposes to use Dimension 2EW, a specialty herbicide. Is it a good choice?

# Pesticide

# Label



Exercise

Remember, READ THE LABEL

It's the Law



### **Dimension**

#### 2EW

#### SPECIALTY HERBICIDE

Provides control of listed annual grasses and broadleaf weeds in:

- Established lawns
- Commercial sod farms
- Ornamental and sports turf (including but not limited to sport fields, golf course fairways, roughs, tee boxes, unimproved turfgrass areas)
- Container grown ornamentals
- Field-grown ornamentals
- Landscape ornamentals
- Non-cropland such as: airports, barrow ditches, cemeteries, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, hard-surface cracks, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, gas and oil pads, parking lots, petroleum tank yards, pipelines, pump stations, railroads, roadsides, debris retention areas, service roads, solar fields, storage areas or yards, substations, vacant lots and other non-crop residential and commercial areas
- Natural areas (open space) such as: restoration sites, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas
- Christmas tree farms

In New York State, this product may be used by commercial applicators only, at no more than 2 pints (0.5 lb active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per acre per year of this product (equivalent to 0.25 lb of active ingredient per acre).

GHOUP	2	HEHBICIDE	
Active Ingredient			
dthiopyr: 5,5'-dimethyl 2-(difluoromethyl)-4-			
(2-methylpropyl)-6-(b			
3,5-pyridinedicarboti	sigate	24%	
Other Ingredients		70%	
Total		1000	

Contains petroleum distillates Contains 240 grams per liter or 2 lb active ingredient per U.S. gallon.

#### Keep Out of Reach of Children

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detaile. (If you do not understand the label, find someone to explain it to you in detail.)

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under 'Agricultural Use Requirements' in the Directions for Use section for information about this standard.

#### Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

in case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs. or dothing.

EPA Reg. No. 62719-542

EPA Est. 5905-IA-01

"Trademark of The Dow Chemical Company ("Dow") or an affiliated. company of Dow

Produced for Dow AgroSciences LLC 9000 Zionsville Road Indianapolis, IN 46268

NET CONTENTS 2.5 GAL

# Who can I call with specific questions about Dimension 2EW?

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You can call the manufacturer

# Can Dimension 2EW be used to treat crabgrass?

- 1. True
- 2. /False

# Can Dimension 2EW be used to treat crabgrass?





# Can Dimension 2EW be used to treat crabgrass?

This product will not control emerged broadleaf weeds or grasses (except for crabgrass in early stages of growth).

#### **Common Name**

#### Grasses

barley barnyardgrass bluegrass, annual brome crabgrass, large crabgrass, smooth crabgrass, southern

#### Scientific Name

Hordeum spp.
Echinochloa crus-galli
Poa annua
Bromus spp.
Digitaria sanguinalis
Digitaria ischaemum
Digitaria ciliaris

# Dimension 2EW is a Moderately Risk Pesticide?

- 1. True
- 2. /False

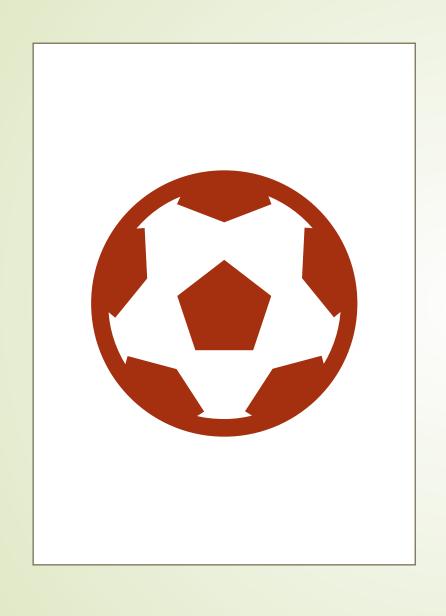
# Dimension 2EW is a Moderate Risk Pesticide?







**FALSE** 



When can the soccer team return to practice ? When can the soccer team return to practice?

#### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

 Keep unprotected persons out of treated area until sprays have dried.

# Dimension 2EW is a

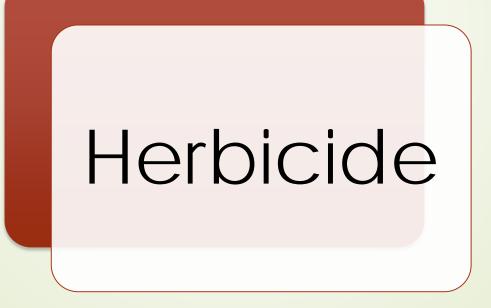
?

Herbicide

Insecticide

Rodenticide

# 





# **Dimension**

## 2EW

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- Exablished lawns
- · smmercial and farms
- Ornamental and sports turf (including but not limited to sport fields, golf course fairways, roughs, tee boxes, unimproved turfgrass areas)
- Container grown ornamentals
- Field-grown ornamentals
- Landscape ornamentals
- Non-cropland such as: airports, barrow ditches, cemeteries, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, hard-surface cracks, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, gas and oil pads, parking lots, petroleum tank yards, pipelines, pump stations, railroads, roadsides, debris retention areas, service roads, solar fields, storage areas or yards, substations, vacant lots and other non-crop residential and commercial areas
- Natural areas (open space) such as: restoration sites, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas
- Christmas tree farms.

in New York State, this product may be used by commercial applicators only, at no more than 2 pints (0.5 is active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per acre per year of this product jequivalent to 0.25 ib of active ingredient per acre).

Contains petroleum distillates

Contains 240 grams per liter or 2 lb active ingredient per U.S. gallon.

## WARNING AVISO

Si unted no entiende la etiqueta, busque a alguien para que se la explique a unted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### Agricultural Use Requirements

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#### Refer to label booklet for Directions for Use.

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Agricultural Chemical: Do not ship or store with food, feeds, drugs or dothing.

EPA Reg. No. 62719-542

EPA Est. 5905-IA-01 99033373

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**NET CONTENTS 2.5 GAL** 

# The Environmental Protection Agency Reg No. for Dimension 2EW

- 1. 62719-542
- 2. 5905-IA-01
- 3. 99033373



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Active increasers	
dthopy: \$.5'-dimetry 2-idfluorametryl-4-	
Q-metrylpropyl-4-trifisprometryl-	
1.5-pundinatica/sorricals 24%	
Celar Ingradiants	

Contains peticleum distillates Contains 240 grams per iter or 2 to active ingredient per U.S. gallon

## Keep Out of Reach of Children

someone to explain it to you in detail.)

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Agricultural Chemical Do not sing or store with food, feeds, drugs

EPA Reg. No. 62719-542

Indianapolis, IN 46268

EPA Dat. 5905-1A-05

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- and commercial areas.

  Natural areas (open space) such a systoration atex, campgrounds, parks, prairie managen, of traits and traitheads, recreation areas, wildfile opens, and wildfile habital and management areas.
- · Christmas tree farms

Other Ingredients.

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Į	GROUP	3	HERBICIDE			
	Actus ingredient dithicput 5.5 -dimetry 2 -diffuorametryl-+					
	Q-metrylpropyl+6-trifluorometryl+					
	1.5-pyridinatica/sor/soa/s					

Contains percieum decilises

Coreana 240 grams per liter or 2 to active ingredient per U.S. galon.

### Keep Out of Reach of Children WARNING AVISO

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in case of emergency enclangeing health or the envelopment involving this product call 1-800-982-5894.

Agricultural Chemical: Do not stup or store with food, feeds, drugs or dotting.

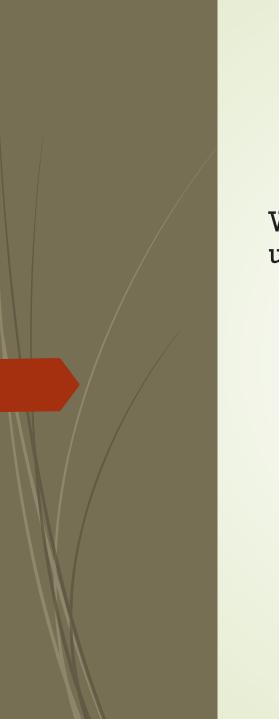
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EPA Dat. 5905-(A-05)

"Testement of The Dow Chemical Company ("Dow") or an affiliated company of Dow Produced For Produced for Dow AgroSciences LLC 2000 Tennyship Road

**NET CONTENTS 2.5 GAL** 



What are the environmental issues when using Dimension 2EW is \_\_\_\_\_?

What are the environmental issues when using Dimension 2EW is

#### **Environmental Hazards**

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

# The percentage of the active ingredient dithiopyr in Dimension 2EW is \_\_\_\_\_?

- 1. 24.00%
- 2.76.00%
- 3. 100.00%

# The percentage of the active ingredient dithiopyr in Dimension 2EW is \_\_\_\_\_\_?

- **1. 24.00%**
- 2.76.00%
- 3. 100.00%

Does the turf company need to post the treated field?

# Does the turf company need to post the treated field?

In addition to the notice provisions above, whenever pesticide applications not exempted by Section 3 are performed in a school building or on school grounds, a sign shall be posted at each point of access to the treated area and in a common area of the school at least two working days prior to the application and for at least forty-eight hours following the application. Posting of the notification signs as required by this rule satisfies the posting requirements of Chapter 28 of the Board's rules (CMR 01-026 Chapter 28).

# CAUSTICIDE APPLICATION PESTICIDE APPLICATION

DATE & TIME OF APPLICATION ▼

RE-ENTRY PRECAUTIONS ▼

SIGN REMOVAL DATE ▼

PESTICIDE APPLICATION COMPANY & PHONE NO. ▼



# Where do you start?— Don't forget IPM!

Is a pesticide the right answer?

- Are there non-chemical strategies that can be used to control the pest?
- Is the pest still present?
- Are there enough pests to require control? (threshold)
- Is the pest in a susceptible stage?

# STAY SAFE, EVERYONE!

