NOTICE LANDSCAPE APPLICATION

Date of Application: April 14, 2025

Location: Pueblo Park in the small turf area by the basketball court.

Reason for Application: Fertilize fescue turf to provide uniform growth with extended nitrogen feeding.
Product Manufacturer Name: Lesco Professional Turf Fertilizer 28-3-7.
-Active ingredients: N/A
-Precautionary statement: Harmful if inhaled. Eye and skin irritant. Avoid breathing dust. Avoid contact with skin, eyes, or clothing.

Reason for Application: Treat the turf for broadleaf and crabgrass weed control. **Product Manufacturer Name:** Power Zone Broadleaf Herbicide for Turf
-EPA registration no. 2217-834
-Active ingredients: MCPA, 2-ethylhexyl/ester, Mecoprop-p acid, Dicamba acid, and Carfentrazone-ethyl.
-Precautionary statement: Causes moderate eye irritation. Harmful if absorbed through skin. Harmful if swallowed.
Product Manufacturer Name: Bayer Specticle Flo
-EPA registration no. 432-1608
-Active ingredients: Indaziflam
-Precautionary statement: Harmful if inhaled. May cause damage to organs (nervous system) through prolonged or repeated exposure. Do not breathe spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

***See attached label and SDS sheet**
***Dates are subject to change due to weather**

28-3-7

LESCO PROFESSIONAL TURF FERTILIZER

For use in Rotary Spreaders Only
Contains LESCO® Poly Plus® Polymer Coated Urea to provide uniform growth with extended nitrogen feeding.

50 lb COVERS 14,000 sq ft SGN 240

DIRECTIONS FOR USE: This LESCO product is a professional quality turf fertilizer for use on all lawn areas. The best results with this product are obtained when it is applied to actively growing grass, and watered into the turf soon after application. Avoid mowing immediately following application to prevent pick-up.

For best results, sweep or blow the fertilizer off walks and painted surfaces following application to avoid discoloration.

Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn\garden, and sweep any product that lands on the driveway, sidewalk, or street back onto your lawn\garden.

Recommended applications are at the rate of one pound of nitrogen per 1,000 sq ft. Actual rates and timing of applications will vary with weather, soil and turf conditions.

For additional LESCO, Inc. product assistance call 1-800-347-4272.

COVERAGE: 50 pounds of LESCO 28-3-7 Fertilizer covers approximately 14,000 sq ft at the application rate of one pound of nitrogen (3.6 pounds of fertilizer) per 1,000 sq ft.

GUARANTEED ANALYSIS

TOTAL NITROGEN (N).....28.00%
1.17% Ammoniacal Nitrogen
26.83% Urea Nitrogen*
AVAILABLE PHOSPHATE (P_2O_5).....3.00%
SOLUBLE POTASH (K_2O).....7.00%
SULFUR (S) Total.....2.38%
2.38% Combined Sulfur (S)
IRON (Fe) 3.50%
0.04% Water Soluble Iron (Fe)
MANGANESE (Mn) 2.50%
0.50% Water Soluble Manganese (Mn)

DERIVED FROM: Polymer Coated Urea, Urea, Diammmonium Phosphate, Sulfate of Potash, Iron Sucrate, Manganese Oxide, Manganese Sulfate.

*10.08% Slowly Available Urea Nitrogen from Polymer Coated Urea.

ROTARY SPREADER SETTINGS: Apply LESCO Fertilizers and Combination Products only with a rotary spreader. The following rotary spreader settings are approximate for the application rates of one pound of nitrogen per 1,000 square feet. You may need to adjust the setting depending on walking speed, spreader condition and product. An extended Spreader Setting listing can be found at www.lesco.com.

ROTARY SPREADER	SETTINGS
LESCO – All Rotary Models	#14
PermaGreen	14
Cyclone®/ Spyker® /Z-Spray	4¼
Vicon (LESCO Pendulum)	22
Lely®	4 II

WARNING

Harmful if inhaled. Eye and skin irritant. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.
The Directions for Use of this product must be followed carefully and completely. It is impossible to eliminate all risks inherently associated with the use of this product. Buyer and/or User assume all risks of ineffectiveness or other unintended consequences or damages that may result from conditions outside or beyond the control of LESCO, Inc. including but not limited to such factors as manner of use or application, weather or weather conditions outside the range considered normal at the application site or for the time period in which the product is applied, the, presence of other materials, incompatible products, or other influencing factors which are beyond the control of LESCO, Inc.. All such risks shall be assumed by Buyer and/or User, and Buyer and/or User agrees to hold LESCO, Inc. harmless for any claims relating to such factors.
LESCO, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with the Directions for Use under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of LESCO, Inc. and Buyer and/or User assume the risk of any such use.
LESCO, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.
THE EXCLUSIVE REMEDY OF THE BUYER AND/OR USER AND THE EXCLUSIVE LIABILITY OF LESCO, INC. FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF LESCO, INC. REPLACEMENT OF THE PRODUCT, OR IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL LESCO, Inc., BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.
LESCO, Inc. offers this product, and Buyer and/or User accepts it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of LESCO, Inc.
Information concerning the raw materials composing this product can be obtained by writing to: LESCO, Inc., Attn: RA Dept, 1385 East 36th Street, Cleveland, Ohio 44114-4114, referring to the item number found on this bag.
Information regarding the contents and levels of metals in this product is available on the Internet at http://www.aapfco.org/metals.htm.
Poly Plus is comprised of Polymer Coated Urea.

N:\Regulatory\WP\Regul Private\MstrLbl_ERIEVIEW ADDRESS\Landscape Style Master Lbls\Fertilizer Labels
Rev. 3/3/16 VT

510030
PP

F1560

Net Weight 50 lb (22.7 kg)

Manufactured for: **LESCO, Inc.**
1385 East 36th Street
Cleveland, OH 44114-4114

1015SDS2

LESCO Granular Fertilizer – All Analyses

Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and

Regulations Revision Date: 9/20/2019 Date of issue: 9/20/19

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: LESCO Granular Fertilizer – All Analyses

Other means of identification: Granular fertilizers including all chemical, partially sulfur coated, 100% polymer or sulfur coated nutrients, with and without micronutrients.

1.2. Intended Use of the Product

Use of the substance/mixture: Fertilizer

1.3. Name, Address, and Telephone of the Responsible Party

Company

LESCO, Inc.
1385 East 36th St
Cleveland, OH 44114
T 800-347-4272

1.4. Emergency Telephone Number

Emergency Number : 1-800-424-9300
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Skin Sens. 1	H317
STOT SE 3	H335
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US) : P261 - Avoid breathing dust
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves, protective clothing
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see Section 4)

P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international regulations

2.3. Other Hazards

Other Hazards: No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Urea	(CAS No) 57-13-6	0.1 - 98	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
Sulfuric acid, dipotassium salt	(CAS No) 7778-80-5	0.1 - 95	Not classified
Diammonium phosphate	(CAS No) 7783-28-0	0.1 - 95	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 Aquatic Acute 3, H402
Potassium chloride	(CAS No) 7447-40-7	0.1 - 95	Aquatic Acute 3, H402
Monoammonium phosphate	(CAS No) 7722-76-1	0.1 - 95	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Ammonium sulfate	(CAS No) 7783-20-2	0.1 - 95	Aquatic Acute 2, H401
Limestone	(CAS No) 1317-65-3	0.1 - 95	Not classified
Sulfur	(CAS No) 7704-34-9	0.1 - 20	Comb. Dust, H232 Flam. Sol. 2, H228 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Aquatic Acute 3, H402
Iron oxide (Fe2O3)	(CAS No) 1309-37-1	0.1 - 10	Not classified
Urea, polymer with formaldehyde	(CAS No) 9011-05-6	0.1 - 10	Not classified
Magnesium sulfate	(CAS No) 7487-88-9	0.1 - 10	Skin Sens. 1, H317
Ferrous sulfate	(CAS No) 7720-78-7	0.1 - 10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400
Manganese oxide (Mn3O4)	(CAS No) 1317-35-7	0.1 - 10	Not classified
Sulfate of Potash-Magnesia	(CAS No) 14977-37-8	0.1 - 10	Not classified

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: If medical advice is needed, have product container or label at hand.

First-aid Measures After Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: If a large quantity has been ingested : Abdominal pain. Diarrhea. Nausea. Vomiting.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Not considered flammable but will burn at high temperatures. . Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Decomposes above 132 °C (270 °F). Under conditions of fire this material may produce: Ammonia. Nitrogen oxides. Biuret. Cyanuric acid.

Explosion Hazard: May form explosive compounds if mixed with: Calcium hypochlorite. Sodium hypochlorite. Nitrates. Nitric acid. Perchloric acid. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

5.3. Advice for Firefighters

Firefighting Instructions: Not flammable.

Protection During Firefighting: Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. This material becomes slippery when wet.

6.1.1. For Non-emergency Personnel

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: If possible, stop flow of product. Contain and collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

Methods for Cleaning Up: Recover the product by vacuuming, shovelling or sweeping. Avoid generation of dust during clean-up of spills. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Material may be used if uncontaminated.

6.4. Reference to Other Sections No additional information available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: This material becomes slippery when wet.

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment. Avoid creating or spreading dust.

Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture.

Prohibitions on mixed storage: Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.

Special Rules on Packaging: Corrosive to copper and its alloys.

7.3. Specific End Use(s)

Fertilizer.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Limestone (1317-65-3)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³

Iron oxide (Fe2O3) (1309-37-1)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³
USA IDLH	US IDLH (mg/m³)	2500 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³

8.2. Exposure Controls

Appropriate Engineering Controls : Ensure all national/local regulations are observed.

Personal Protective Equipment : Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. For particulates and dust: Safety glasses.

Hand Protection : protective gloves.

Eye Protection : Safety glasses.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Environmental Exposure Controls : Ensure adequate ventilation, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Granules. Multi-colored.

Color : White

Odor : Slight. Pungent.

Odor Threshold : No data available

pH : No data available

pH solution : 10 %

Relative Evaporation Rate (butylacetate=1) : No data available

Melting Point : No data available

Freezing Point : No data available

Boiling Point : No data available

Flash Point : No data available

Auto-ignition Temperature : No data available

Decomposition Temperature : No data available

Flammability (solid, gas) : No data available

Vapor Pressure : No data available

Relative Vapor Density at 20 °C : No data available

Relative Density : No data available

Density : 45 (45 - 65) lb/ft^3

Solubility : Water: Moderately

Partition coefficient: n-octanol/water : No data available

Viscosity : No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

10.2 Chemical Stability: Stable at standard temperature and pressure.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Protect from moisture. Keep away from heat.

10.5 Incompatible Materials: May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with : Strong oxidizers. Strong acids, bases. Nitrates. Hypochlorites. Perchlorates. Chlorides. Corrosive to copper and its alloys.

10.6 Hazardous Decomposition Products: Under conditions of fire this material may produce: Nitrogen oxides. Ammonia. Biuret. Carbon oxides (CO, CO2). Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Sulfuric acid, dipotassium salt (7778-80-5)	
LD50 Oral Rat	6600 mg/kg
ATE (Oral)	6,600.00 mg/kg body weight

Diammonium phosphate (7783-28-0)	
LD50 Oral Rat	6500 mg/kg
LD50 Dermal Rabbit	> 7950 mg/kg
ATE (Oral)	6,500.00 mg/kg body weight

Potassium chloride (7447-40-7)	
LD50 Oral Rat	2600 mg/kg
ATE (Oral)	2,600.00 mg/kg body weight

Monoammonium phosphate (7722-76-1)	
LD50 Oral Rat	5750 mg/kg
LD50 Dermal Rabbit	> 7940 mg/kg
ATE (Oral)	5,750.00 mg/kg body weight

Ammonium sulfate (7783-20-2)	
LD50 Oral Rat	> 2000 mg/kg

Sulfur (7704-34-9)	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 9.23 mg/l/4h

Iron oxide (Fe2O3) (1309-37-1)	
LD50 Oral Rat	> 10000 mg/kg

Urea, polymer with formaldehyde (9011-05-6)	
LC50 Inhalation Rat	> 167 mg/m³ (Exposure time: 4 h)

Ferrous sulfate (7720-78-7)	
LD50 Oral Rat	237 mg/kg
ATE (Oral)	237.00 mg/kg body weight

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Iron oxide (Fe2O3) (1309-37-1)	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: If a large quantity has been ingested : Abdominal pain. Diarrhea. Nausea. Vomiting.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Sulfuric acid, dipotassium salt (7778-80-5)	
LC50 Fish 1	653 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 Daphnia 1	890 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	3550 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Diammonium phosphate (7783-28-0)	
LC50 Fish 1	26.5 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC 50 Fish 2	24.8 - 29.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

Potassium chloride (7447-40-7)	
LC50 Fish 1	1060 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	825 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	750 - 1020 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Ammonium sulfate (7783-20-2)	
LC50 Fish 1	5.2 (5.2 - 8.2) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	32.2 (32.2 - 41.9) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

Sulfur (7704-34-9)	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC 50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Magnesium sulfate (7487-88-9)	
LC50 Fish 1	2610 - 3080 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	266.4 - 417.3 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Ferrous sulfate (7720-78-7)	
LC50 Fish 1	925 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
EC50 Daphnia 1	152 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	0.56 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 2	6.15 - 9.26 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Urea (57-13-6)	
LC50 Fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and Degradability

LESCO Granular Fertilizer – All Analyses	
Persistence and Degradability	May cause long-term adverse effects in the environment. This product is water soluble and eventually biodegrades into elemental nitrogen. Exess nitrogen and nitrates in a body of water will contribute to eutrophication with visible effects such as toxic algae bloom.

12.3. Bioaccumulative Potential

Diammonium phosphate (7783-28-0)	
BCF fish 1	(no bioaccumulation expected)

Monoammonium phosphate (7722-76-1)	
BCF fish 1	(no bioaccumulation expected)

Ammonium sulfate (7783-20-2)	
Log Pow	-5.1 (at 25 °C)

Urea (57-13-6)	
BCF fish 1	< 10
Log Pow	-1.59 (at 25 °C)

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Place in an appropriate container and dispose of the contaminated material at a licensed site.

Additional Information: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

LESCO Granular Fertilizer – All Analyses	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Sulfuric acid, dipotassium salt (7778-80-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Diammonium phosphate (7783-28-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium chloride (7447-40-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Monoammonium phosphate (7722-76-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ammonium sulfate (7783-20-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Limestone (1317-65-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sulfur (7704-34-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron oxide (Fe2O3) (1309-37-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Urea, polymer with formaldehyde (9011-05-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Magnesium sulfate (7487-88-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ferrous sulfate (7720-78-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Manganese oxide (Mn3O4) (1317-35-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Urea (57-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Ammonium sulfate (7783-20-2)
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Limestone (1317-65-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Sulfur (7704-34-9)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Iron oxide (Fe2O3) (1309-37-1)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Ferrous sulfate (7720-78-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Manganese oxide (Mn3O4) (1317-35-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 9/20/2019

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

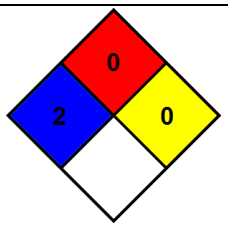
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Sol. 2	Flammable solids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H228	Flammable solid
H232	May form combustible dust concentrations in air
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life

H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA Fire Hazard : 0 - Materials that will not burn.

NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



IMPORTANT: LESCO urges each customer or recipient of this Safety Data Sheet (SDS) to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and is based on our current knowledge. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. It is the buyer's/user's responsibility to ensure that his or her activities comply with all federal, state, provincial and local laws. The information presented here pertains only to the product as shipped. It is the buyer's/user's duty to determine the conditions necessary for safe use of this product.

The SDS serves different purposes than, and DOES NOT REPLACE OR MODIFY, THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

SDS US (GHS HazCom)

PowerZone®

BROADLEAF HERBICIDE FOR TURF

ACTIVE INGREDIENTS:

MCPA, 2-ethylhexyl ester	41.98%
Mecoprop-p acid	5.39%
Dicamba acid	2.69%
Carfentrazone-ethyl	0.48%
OTHER INGREDIENTS:	49.46%
TOTAL	100.00%

THIS PRODUCT CONTAINS:

2.21 lbs. 2-methyl-4-chlorophenoxyacetic acid equivalent per gallon or 26.92%.
0.44 lb. (+)-R-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 5.39%.
0.22 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 2.69%.
0.04 lb. Ethyl α,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.48%.

Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are made of barrier laminate, butyl rubber, nitrile rubber, or viton. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks, and
- Chemical-resistant gloves.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Engineering Control Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or on clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

NOTE TO PHYSICIAN: Contains petroleum distillates - vomiting may cause aspiration pneumonia.

Environmental Hazards

This pesticide may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- coveralls worn over short-sleeved shirt and short pants,
- chemical-resistant footwear plus socks,
- chemical-resistant gloves made of any water-proof material,
- chemical-resistant headgear for overhead exposure and
- protective eyewear.

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.

Reentry Statement: Do not enter or allow others to enter the treated area until sprays have dried.

PRODUCT DESCRIPTION:
PowerZone® Broadleaf Herbicide For Turf contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production.

PowerZone offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool season turfgrass and warm season turfgrass.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7 to 14 days.

SPRAY PREPARATION AND TANK MIXTURES:
PowerZone is an emulsifiable concentrate intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

Water as diluent:
Add one-half the required amount of water to the spray tank, then add PowerZone slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture. Storage of the spray mixture beyond 72 hours is not recommended.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

Liquid fertilizers as diluents:
Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (eg. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

GROUND EQUIPMENT:
Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. Do not use flood nozzles, Raindrop®, or nozzle tips larger than 8008. Spray droplets larger than 400 microns may reduce coverage and subsequent loss in weed control.

Spray volumes of 3 to 175 gallons per acre with spray pressures adjusted to 20 to 40 psi are appropriate. Use higher spray volumes for dense weed populations.

Hand operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical.

This product may cause injury to susceptible/nontarget plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Do not apply when conditions are conducive to spray drift from the use site to untreated areas.

After using this product, clean sprayer with soap or detergent and water, or an approved spray tank cleaner and rinse thoroughly before applying other pesticides.

Do not apply by air.

WHERE TO USE:
PowerZone provides selective broadleaf control in warm season and cool season turfgrass in five (5) use sites.

- **Institutional sites** are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways, aprons, and roughs), and office buildings.
- **Ornamental sites** include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, and areas adjacent to athletic fields.
- **Residential/domestic sites** are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- **Agricultural site:** Commercial sod production
- **Noncropland Sites:** Highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians. Municipal, state, and federal lands: Airports and military installations.

Prohibitions of Sites:

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.
- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not apply this product to St. Augustinegrass during spring green-up which is the transition period between dormancy and active growth.
- Cultivars of St. Augustinegrass vary in tolerance to this product. Do not apply to 'Floratam' St. Augustinegrass.
- Do not use this product on or near desirable plants, including contact of spray on exposed root systems or adventitious shoots within the drip line of desirable trees and shrubs, since injury may result.
- Do not apply by air.

Turfgrass tolerance:
The turfgrass tolerance to PowerZone may vary and temporary turfgrass yellowing may occur on certain varieties of hybrid bermudagrass. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

These cool season and warm season turfgrass species may be treated:

Cool Season Turf
Kentucky bluegrass
Annual bluegrass
Annual ryegrass
Perennial ryegrass
Tall fescue
Red or fine leaf fescues
Mixtures of cool season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass, and orchardgrass)

Warm Season Turf
Common bermudagrass
Hybrid bermudagrass
Zoysiagrass

APPLICATION SCHEDULES:
Early postemergent applications of PowerZone are recommended for annual, biennial, and perennial weeds. Apply PowerZone to broadleaf weeds that are young and actively growing for the best results. PowerZone combines a contact herbicide with systemic herbicides and provides little or no residual activity at specified use rates.

PowerZone may be applied as a single broadcast application or as a split/sequential broadcast applications in the spring, summer, or fall. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective.

Apply sequential broadcast applications or followup applications as spot treatments at a minimum interval of 30 days.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of PowerZone. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to PowerZone.

For newly seeded areas:
The application of PowerZone to grass seedlings is recommended after the second mowing.

For newly sodded, sprigged, or plugged areas:
The application of PowerZone to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

For dormant turf:
Applications to dormant bermudagrass, and dormant zoysiagrass are suggested.

Prohibitions for application schedules:
Do not broadcast apply when air temperatures exceed 90°F; some injury may be expected with spot treatments when air temperatures exceed 90°F.

HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES FOR TURFGRASS:
Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Use rates and spray volumes of PowerZone as broadcast treatments for use on turfgrass are presented in Table 1.

TABLE 1. USE RATES FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.

Species	Amount of Product for SENSITIVE WEEDS	Amount of Product for HARD-TO-CONTROL WEEDS	Spray Volume	
			Gallons Per Acre	Gallons Per 1,000 sq. ft.
Cool-Season Turf: Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall Fescue, Red or Fine Fescue. Mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass & orchardgrass).	3.5 to 4 Pints/Acre (1.3 to 1.5 fl. oz. per 1,000 sq. ft.)	4 to 5 Pints/Acre (1.5 to 1.8 fl. oz. per 1,000 sq. ft.)	3 to 175	0.1 to 4.0
Warm Season Turf: Common and Hybrid Bermudagrass, Zoysiagrass.	2 to 3 Pints/Acre (0.75 to 1.1 fl. oz. per 1,000 sq. ft.)	3 to 4 Pints/Acre (1.1 to 1.5 fl. oz. per 1,000 sq .ft.)	3 to 175	0.1 to 4.0

Limitations on broadcast treatments for turfgrass on all use sites:
The maximum application rate is 5.0 pints of product per acre per application (1.38 lb. MCPA ae, 0.28 lb. MCPP-p ae, and 0.14 lb. dicamba ae per acre per application). The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum seasonal rate is 10 pints of product per acre per year (2.76 lb. MCPA ae, 0.55 lb. MCPP-p ae, and 0.28 lb. dicamba ae per acre per year), excluding spot treatments.

SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):

- For cool season turfgrass, mix 1.5 to 2.2 fl. oz. of PowerZone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft. of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.
- For warm season turfgrass, mix 0.75 to 1.5 fl. oz. of PowerZone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft. of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.

Limitations on spot treatments for turfgrass on all use sites:
Spot treatment is defined as a treatment area no greater than 1,000 sq. ft. per acre. The maximum application rate is 2.2 fl. oz. per 1,000 sq. ft. per application (0.33 lb. MCPP-p acid equivalent per acre). The maximum number of spot treatments is limited to 2 per year with a minimum of 30 days between applications.

Tank Mixtures:
PowerZone may be tank mixed with other herbicides EPA-registered for use on turfgrass to broaden the weed control spectrum compared to the products alone. These tank mixtures must be used according to the most restrictive label limitations and precautions. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

CULTURAL TIPS FOR IMPROVED CONTROL:
Irrigation:

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Do not irrigate or water the turfgrass within 24 hours after application

Mowing:

- Delay mowing 1 to 2 days before and after the application of this product.

Reseeding interval:

- Treated areas may be reseeded 2 weeks after application.

SPRAY DRIFT MANAGEMENT
Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed
Apply only when the wind speed is 2 to 10 mph at the application site. Do not apply at wind speeds greater than 10 mph.

Additional requirements for ground boom application:
Do not apply with a nozzle height greater than 4 feet above the crop canopy.

BROADLEAF WEEDS CONTROLLED:
PowerZone will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to MCPA.

BROADLEAF WEEDS

Annual fleabane
Aster, white heath & white prairie
Bedstraw
Beggarticks
Beggarweed, creeping
Bindweed
Birdsfoot trefoil
Black medic
Broadleaf plantain
Buckhorn plantain
Bull thistle
Burclover
Burdock, common
Buttercup, creeping
Carolina geranium
Carpetweed
Chickweed, common
Chicory
Cinquefoil
Clover
Cocklebur
Common mullein
Compassplant
Curly dock
Dandelion
Dayflower
Deadnettle
Dock
Dogfennel
Dovefoot geranium
English daisy
False dandelion (*spotted catsear & common catsear)
Field bindweed (*morningglory & creeping jenny)
Field madder
Field oxeye-daisy (*creeping oxeye)
Field pennycress
Filaree, whitestem & redstem
Florida pusley
Ground ivy
Groundsel
Hairy bittercress
Hawkweed
Healall
Henbit
Horsenettle
Horseweed
Innocence (Blue-eyed Mary)
Jimsonweed
Kochia
Lambsquarters
Lawn burweed
Lespedeza, common
Mallow, common
Matchweed
Mouseear chickweed
Mustard
Nettle
Old world diamond flower
Oxalis (*yellow woodsorrel & creeping woodsorrel)
Parsley-piert
Pennsylvania smartweed
Pennywort (*dollarweed)
Pepperweed
Pigweed
Pineappleweed
Plantain
Poison ivy
Poison oak
Prostrate knotweed (*knotweed)
Puncturevine
Purple cudweed
Purslane
Ragweed
Redweed
Red sorrel (*sheep sorrel)
Roundleaf greenbriar
Shepherd's purse
Spotted spurge
Spurge, prostrate
Star-of-Bethlehem
Sunflower
Thistle
Velvetleaf (*buttonweed)
Venice mallow
Veronica (*corn speedwell)
Virginia buttonweed
Virginia creeper
Western salsify
White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Wild carrot
Wild garlic
Wild geranium
Wild lettuce
Wild mustard
Wild onion
Wild strawberry
Wild violet
Yarrow
Yellow rocket

*Synonyms

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(cont. on next page)

STORAGE AND DISPOSAL *(cont.)*

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

LIMITED WARRANTY AND DISCLAIMER

IMPORTANT: Read this LIMITED WARRANTY AND DISCLAIMER before buying or using this product. By opening and using this product, buyer and all users agree to accept the terms of this LIMITED WARRANTY AND DISCLAIMER in their entirety and without exception. If the terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full.

It is impossible to eliminate all risks inherently associated with use of this product. Damage to the treated article, ineffectiveness, or other unintended consequences can result from use of the product under abnormal conditions such as weather, presence of other materials, or the manner of use or application, etc. Such factors and conditions are beyond the control of the manufacturer, and **BY PURCHASING AND USING THIS PRODUCT THE BUYER AND ALL USERS OF THIS PRODUCT AGREE TO ACCEPT ALL SUCH RISKS.** Buyer and all users further agree to assume all risks of loss or damage from the use of the product in any manner that is not explicitly set forth in or that is inconsistent with label instructions, warnings and cautions.

The manufacturer warrants only that this product conforms to the chemical description given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use, subject to the inherent risks described below. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF BUYER AND ALL USERS OF THIS PRODUCT, AND THE EXCLUSIVE LIABILITY OF THE MANUFACTURER, FOR ANY AND ALL LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. The Manufacturer must be promptly notified in writing of any claims, whether based in contract, tort, negligence, strict liability, or otherwise, to be eligible to receive either remedy stated above.

The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere. No employee or agent of the manufacturer or seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

653/12-2018 AP110409
EPA REG. NO. 2217-834

pbi/gordon corporation
Employee-Owned

MANUFACTURED BY
PBI/GORDON CORPORATION
P.O. BOX 860350
SHAWNEE, KANSAS 66286
PBIGordonTurf.com

ATTENTION: This specimen label is provided for informational use only. This product may not yet be available for sale in your state or area. The information found in this label may differ from the information found on the product label you are using. Always follow the instructions for use and precautions on the label of the product you are using.

pbi/gordon corporation
An Employee-Owned Company

SAFETY DATA SHEET

Issue Date 07-Nov-2014 **Revision Date** 11-Jan-2019 **Version** 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name PowerZone® Broadleaf Herbicide for Turf

Other means of identification
Product Code PBI FP 6531076
EPA Pesticide Registration Number 2217-834
Product Size 4/1 U. S. Gal.

Recommended use of the chemical and restrictions on use
Recommended Use Herbicide.
Uses advised against No information available.

Details of the supplier of the safety data sheet

Supplier	Manufacturer	Company Name
PBI Gordon Corporation P.O. Box 860350 Shawnee, KS 66286	PBI Gordon Corporation P.O. Box 860350 Shawnee, KS 66286	PBI Gordon Corporation P.O. Box 860350 Shawnee, KS 66286

Emergency telephone number
Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Gases	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation Category	Category 2
Serious eye damage/eye irritation	Category 2B
Skin Sensitization	Category 1
Aspiration Toxicity	Category 1
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1
Flammable liquids	Category 4

Label elements

Emergency Overview

Danger

Hazard statements
Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Combustible liquid.

Appearance Liquid **Physical state** Liquid **Odor** Esters

Precautionary Statements - Prevention
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Precautionary Statements - Response
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting
- In case of fire: Use CO2, dry chemical, or foam for extinction
- Collect spillage

Precautionary Statements - Storage
- Store locked up
- Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
- Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Have the product label with you when calling a poison control center or doctor or going in for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight-%
MCPA EH Ester	29450-45-1	41.98
Trade Secret	Proprietary	10-20*
Trade Secret	Proprietary	0-10*
R(+)2(2 Methyl-4-chlorophenoxy)propionic acid (MCPP)	16484-77-8	5.39
3,6-Dichloro-o-anisic acid (Dicamba)	1918-00-9	2.69
Carfentrazone-ethyl	128639-02-1	0.48

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Contains petroleum distillate - vomiting may cause aspiration pneumonia.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Foam. Carbon dioxide (CO2). Dry chemical.

Specific hazards arising from the chemical
No information available.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Dam up. Soak up with inert absorbent material. Cover liquid spill with sand, earth or other non-combustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Keep from freezing.
Incompatible materials	None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines **Other Information**	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles. Face protection shield.
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Liquid	**Odor**	Esters
Color	Amber	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	Not Applicable	
Melting point/freezing point	<35 °F	
Boiling point / boiling range	> 93 °C / 200 °F	
Flash point	> 93 °C / > 200 °F	Pensky-Martens Closed Cup (PMCC)

Evaporation rate	< 1
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	>1
Specific Gravity	0.9813
Water solubility	Emulsifiable
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Oxidizing properties	No information available

Other Information

Density 8.18 pounds/gallon

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization
Will not occur.

Conditions to avoid
Keep out of reach of children.

Incompatible materials
None known.

Hazardous decomposition products
May emit toxic fumes under fire conditions. Hydrogen chloride. Nitrogen oxides (NOx). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritant, moderate respiratory.

Eye contact Moderately irritating to the eyes.

Skin Contact Moderate skin irritation.

Ingestion Ingestion of large amounts can cause abdominal discomfort, nausea, and vomiting.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
MCPA EH Ester 29450-45-1	= 1300 mg/kg (Rat)	-	-
Trade Secret	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Trade Secret	= 1870 µL/kg (Rat)	= 1110 µL/kg (Rabbit)	-

R(+)2(2 Methyl-4-chlorophenoxy)propionic acid (MCPP) 16484-77-8	= 1050 mg/kg (Rat)	> 4 g/kg (Rat)	-
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	= 1039 mg/kg (Rat)	= 1716 mg/kg (Rabbit) > 1 g/kg (Rat) > 2 g/kg (Rabbit)	-
Carfentrazone-ethyl 128639-02-1	= 5143 mg/kg (Rat)	> 4000 mg/kg (Rat)	= 5.09 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization by skin contact.
Germ cell mutagenicity No information available.
Carcinogenicity The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for Carcinogenicity in humans.) The US EPA has given the chlorophenoxy Herbicides 2,4-D, 2,4-DP, MCPP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
MCPA EH Ester 29450-45-1		Group 2B		
R(+)2(2 Methyl-4-chlorophenoxy)propionic acid (MCPP) 16484-77-8		Group 2B		X

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Avoid repeated exposure. Repeated contact may cause allergic reactions in very susceptible persons.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Toxicity 1 % of the mixture consists of ingredient(s) of unknown toxicity

LD50 Oral VALUE (mg/kg) > 2000 mg/kg Rat-male Rat-female
LD50 Dermal VALUE > 2000 mg/kg Rat-female Rat-male
LC50 Inhalation (DUST) VALUE > 2.06 mg/L Rat-male Rat-female

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (inhalation-gas) 2732 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
MCPA EH Ester 29450-45-1	0.46: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.43: 96 h Pseudokirchneriella subcapitata mg/L EC50	3.2 - 4.6: 96 h Lepomis macrochirus mg/L LC50 flow-through 3.2: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.55: 96 h Lepomis macrochirus mg/L LC50 static		0.29: 48 h Daphnia magna mg/L EC50
Trade Secret		2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through		4720: 96 h Den-dronereides heteropoda mg/L LC50
Trade Secret		1.8: 96 h Oncorhynchus mykiss mg/L LC50		

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container, unless specified by the manufacturer.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air)

UN/ID no.	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class	9
Packing group	III
Special Provisions	A97, A158, A197
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III

IATA Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Special Provisions	A97, A158, A197

Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III

IMDG Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
EmS-No.	F-A, S-F
Special Provisions	274, 335, 969
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III, Marine Pollutant

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-834

Federal Insecticide, Fungicide, Rodenticide Act Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

Caution

Keep out of the reach of children

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards

This pesticide may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

International Inventories

TSCA	Not Listed
DSL/NDSL	Not Listed
EINECS/ELINCS	Not Listed
ENCS	Not Listed
IECSC	Not Listed
KECL	Not Listed
PICCS	Not Listed
AICS	Not Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
MCPA EH Ester				X			X			X

Trade Secret	X	X		X			X	X	X	X
Trade Secret	X	X					X	X	X	X
R(+)2(2 Methyl-4-chlorophenoxy)propionic acid (MCPP)				X						
3,6-Dichloro-o-anisic acid (Dicamba)				X		X		X	X	X
Carfentrazone-ethyl							X			

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
3,6-Dichloro-o-anisic acid (Dicamba) - 1918-00-9	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	X	X	X

International Regulations

Mexico - Grade Moderate risk, Grade 2

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of PBI Gordon Corporation's knowledge, information and belief at the date of this publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process, unless specified in the text. PBI GORDON CORPORATION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. Given the variety of factors that can affect the use and application of this product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. Each user is also responsible for evaluating the conditions of use and designing the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. PBI Gordon Corporation assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

End of Safety Data Sheet

INDAZIFLAM | GROUP 29 | HERBICIDE

BAYER

Spect(i)cle® FLO

HERBICIDE

Preemergence Herbicide for the Control of Grasses, Annual Sedges and Broadleaf Weeds in Warm Season Turfgrass, Landscape Ornamentals, Hedgerows, Hardscapes, and Natural Areas

DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

ACTIVE INGREDIENT: Indaziflam	7.4%
OTHER INGREDIENTS:	92.6%
TOTAL:	100.0%

This product is a Suspension Concentrate containing 0.622 lb active ingredient per gallon.

Shake well before use.

EPA Reg. No. 432-1608

Net Contents

1 Gallon

86775387

86699648C 200831AV1

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

PRECAUTIONARY STATEMENTS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential for getting into water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.
This product may enter water through spray drift. Follow precautions for use to avoid spray drift.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is coveralls, waterproof gloves and shoes plus socks.

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 the treated areas until sprays have dried.

PRODUCT INFORMATION

SPECTICLE FLO® HERBICIDE is a selective, preemergence alkylazine herbicide. SPECTICLE FLO HERBICIDE provides extended residual control of many annual grasses including crabgrass, goosegrass, and annual bluegrass, as well as annual sedges, and many broadleaf weeds. Use sites include residential, commercial, recreational, municipal, and institutional turf and ornamentals; roadsides; natural areas; non-bearing fruit and nut trees in residential plantings; sod farms; and hardscapes.

Use SPECTICLE FLO HERBICIDE on established warm season turf in areas including golf courses (roughs and fairways), sod farms, sports fields, residential and commercial lawns, parks, and cemeteries.

SPECTICLE FLO HERBICIDE controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems or at bud break of sensitive plants. SPECTICLE FLO HERBICIDE does not control plants emerging from tubers, rhizomes, bulbs, corms, or existing rootstocks.

SPECTICLE FLO HERBICIDE needs to be activated by rainfall or irrigation prior to weed germination for most effective preemergence control.

SPECTICLE FLO HERBICIDE is a highly active herbicide that provides effective weed control when applied to the soil around many labeled

landscape ornamentals. SPECTICLE FLO HERBICIDE may damage sensitive plants, if the product is allowed to remain in contact with foliage. Carefully apply SPECTICLE FLO HERBICIDE in strict accordance to the label.

PRODUCT USE RESTRICTIONS

- Do not exceed the maximum single application rates specified under each use.
- Do not exceed 18.5 fl oz per acre of SPECTICLE FLO HERBICIDE for all applications within a 12 month period.
- Do not contaminate water intended for irrigation and domestic use.
- Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands and habitat containing aquatic and semi-aquatic plants when SPECTICLE FLO HERBICIDE is used on sod farms, golf courses, and non-crop areas (excluding residential lawns and commercial turf).
- Do not apply SPECTICLE FLO HERBICIDE through an irrigation or chemigation system.
- Do not apply SPECTICLE FLO HERBICIDE by air.
- SPECTICLE FLO HERBICIDE is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

DEACTIVATING SPECTICLE FLO HERBICIDE

Activated charcoal has been shown to deactivate SPECTICLE FLO HERBICIDE if applied within several hours of application. Follow directions for the amount of charcoal to apply on the label of the activated charcoal.

SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator. To reduce the potential for drift, the application equipment must be set to apply medium to very coarse droplets (i.e., ASAE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator must be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Sensitive Areas

Sensitive areas to SPECTICLE FLO HERBICIDE are defined as bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats for endangered species, and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

Spray Drift Management

Make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. For use on golf courses and commercial lawns, the boom height must be no higher than 1-3 feet above the ground and nozzle tips must be set to spray out

medium to very coarse spray droplets. Applications to residential lawns must be made by equipment that maintains coarse spray droplets (to reduce drift).

For use in landscape ornamentals, apply SPECTICLE FLO HERBICIDE around dormant (prior to bud break) or actively growing plants. In either case, the spray must be directed at the base of the plant or away from the plant. Do not allow SPECTICLE FLO HERBICIDE to come in contact with the foliage, as some leaf malformations or discoloration may occur. Minimize contact with above ground stems.

APPLICATION INFORMATION

Apply SPECTICLE FLO HERBICIDE with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control. Avoid skips for the best weed control and overlapping application patterns to avoid plant injury.

Application Volume

Apply SPECTICLE FLO HERBICIDE in a minimum of 10 gallons of water per acre (1 quart of water per 1000 sq ft) and ensure adequate coverage for optimum weed control.

SOIL MOISTURE, IRRIGATION, AND RAINFALL AFTER APPLICATION

To activate SPECTICLE FLO HERBICIDE, irrigate lightly after application to move the herbicide into the soil. Rainfall within several days after application will negate the need to irrigate. Avoid application to saturated soil. Postpone application if rainfall that may cause visible run-off is anticipated.

TANK-MIX COMBINATIONS WITH SPECTICLE FLO HERBICIDE

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

MIXING AND COMPATIBILITY

Mixing Instructions

Add SPECTICLE FLO HERBICIDE to the tank and agitate before adding another product. Mix the amount of SPECTICLE FLO HERBICIDE needed for immediate application needs. Settling can occur if the spray mixture is allowed to sit over an extended period of time. SPECTICLE FLO HERBICIDE is stable in spray solution for up to 48 hours after mixing. Re-agitate the spray solution before application.

Compatibility Testing With Other Pesticides

SPECTICLE FLO HERBICIDE is compatible with many pesticides and liquid fertilizers. A compatibility test must be conducted with any potential tank-mix partner with SPECTICLE FLO HERBICIDE. Using a clear container, conduct the test as described below:

1. Fill the container three-quarters full with water.
2. Add the products to be tank-mixed in the following order: (a) wettable powders (b) dry flowable, (c) aqueous suspensions, (d) SPECTICLE FLO HERBICIDE*, (e) liquids, (f) solutions and emulsifiable liquid concentrates, (g) micronutrients and liquid fertilizers.
3. Shake or stir after each addition to mix thoroughly.
4. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
5. If the compatibility test shows signs of incompatibility, do not tank-mix the product tested with SPECTICLE FLO HERBICIDE.

***Note that a labeled spray rate for SPECTICLE FLO HERBICIDE must be used in any compatibility test. Dilute from a concentrated suspension, or sample from a properly diluted spray solution.**

SPRAYER CLEANUP PROCEDURE

Spray equipment used to apply SPECTICLE FLO HERBICIDE **must be cleaned prior to use on sensitive turf and landscape ornamentals, or injury may result**. Before and after using SPECTICLE FLO HERBICIDE, triple rinse all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a tank cleaner.

RESISTANCE MANAGEMENT

For resistance management, SPECTICLE FLO HERBICIDE contains a Group 29 herbicide (cellulose biosynthesis inhibitor). While no known resistance to SPECTICLE FLO HERBICIDE exists, any weed population may contain or develop plants naturally resistant to this product and other Group 29 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of SPECTICLE FLO HERBICIDE or other Group 29 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific weed biotypes.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). You can also contact your pesticide distributor or university extension specialist to report resistance.

DIRECTIONS FOR USE OF SPECTICLE FLO HERBICIDE ON TURF

Use Restrictions for SPECTICLE FLO HERBICIDE on Turf

- Do not apply to newly seeded turf.
- Do not apply to golf course greens, tees, or collars.
- Do not apply to slopes immediately above golf course greens.
- Do not apply to weakened turf that requires significant fill-in or recovery.

USE OF SPECTICLE FLO HERBICIDE ON TURF IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of turf to SPECTICLE FLO HERBICIDE. Coarse or sandy soils may allow for downward movement of SPECTICLE FLO HERBICIDE into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include sig-

nificant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of SPECTICLE FLO HERBICIDE in these soils, confirm texture with a soil test. Turf grown in soil exceeding 80% sand or 20% gravel may be at risk. Low rate multiple applications of SPECTICLE FLO HERBICIDE may reduce the risk on these soils. Refer to use rates for the 'Split Application Programs' section of this label.
If SPECTICLE FLO HERBICIDE is to be applied on these soils, evaluate turf tolerance in treated soils prior to a large scale application.

Use of SPECTICLE FLO HERBICIDE on Weakened or Stressed Turf

SPECTICLE FLO HERBICIDE controls weeds by inhibiting root development. Newly developing roots of desirable turf may be affected. Turf under stresses such as winterkill, spring dead spot, transitioning ryegrass, bermudagrass spring root decline, soil compaction, foliar and root diseases, nematodes, salt accumulation, shade, excessive foot or equipment traffic, newly verticut turf, and drought should be carefully evaluated before treatment. Application of SPECTICLE FLO HERBICIDE to turf in these situations may delay turf recovery.
Application of SPECTICLE FLO HERBICIDE to stressed turf may produce symptoms of injury including yellowing, purple discoloration, thinning, and necrosis. If injury occurs, promote recovery through optimizing fertility and other cultural practices.

Turf Tolerance

Turf tolerance to SPECTICLE FLO HERBICIDE is acceptable on all labelled turf types and cultivars. Due to the large number of types and cultivars, it is impossible to test every one for tolerance to SPECTICLE FLO HERBICIDE. Neither the Manufacturer nor the Seller has determined whether or not SPECTICLE FLO HERBICIDE can be used safely on turf types and cultivars not specified on this label.
Before using on turf cultivars that are not listed on this label, the applicator must confirm tolerance by testing labelled rates on a small area prior to widespread use.

Tolerant turfgrasses

- **Bermudagrass*** *(Cynodon dactylon)* (and hybrids)-Baby, Celebration, Common**, Floratex, Tifsport, Tifton 10, Tifway 419, Princess, Vamont, Riviera, Yukon
- **Zoysiagrass** *(Zoysia* spp.*)*-Cavalier, Crowne, DeAnza, El Toro, Empire, Jamar, Meyer, Palisades, Zenith, Zeon
- **Centipedegrass*** *(Eremochloa ophiuroides)*- Common, Tifblair
- **St. Augustinegrass*** *(Stenotaphrum secundatum)*-Captiva, Floratam, Floratine, Palmetto, Raleigh
- **Buffalograss** (*Buchloe dactyloides*)
- **Bahiagrass** *(Paspalum notatum)*
- **Seashore paspalum** *(Paspalum vaginatum)*

* Application of SPECTICLE FLO HERBICIDE may temporarily inhibit the rooting of turfgrass stolons.
** Common or off-type Bermudagrass may show increased sensitivity to SPECTICLE FLO HERBICIDE compared to hybrids.
SPECTICLE FLO HERBICIDE may cause unacceptable injury to some turfgrasses. **Do not** use on the following turfgrasses or mixtures containing any of these grasses, unless thinning or removal is desired. For use on grasses in natural areas, see Natural Areas section on this label.

- **Creeping bentgrass** *(Agrostis palustris)*
- **Colonial bentgrass** *(Agrostis capillaris)*
- **Annual bluegrass** *(Poa annua)*
- **Roughstalk bluegrass** *(Poa trivialis)*
- **Fine fescue** *(Festuca rubra)*
- **Turf type tall fescue** *(Festuca arundinaceae)*
- **Kikuyugrass** *(Pennisetum clandestinum)*
- **Perennial ryegrass** *(Lolium perenne)*
- **Annual ryegrass** *(Lolium multiflorum)*
- **Kentucky bluegrass** *(Poa pratensis)*
- **Bermudagrass** *(Cynodon dactylon)* - Ormond

Maximum Single Application Rates for SPECTICLE FLO HERBICIDE on Warm Season Grasses

Turf Type	Application Rate Fluid Ounces of Product per Acre
Bermudagrass	10
Zoysiagrass	10
Buffalograss	10
Bahiagrass	10
St. Augustinegrass	6
Centipedegrass	6
Seashore Paspalum	8

Precautions for Use of SPECTICLE FLO HERBICIDE Near Sensitive Grasses

SPECTICLE FLO HERBICIDE applied uphill to sensitive grasses (such as overseeded ryegrass, roughstalk bluegrass (*Poa trivialis*), and bentgrass) can move and cause injury and stand reduction to adjacent sensitive grasses. Allow turf to dry before allowing foot traffic or equipment through treated areas near sensitive grasses. For Lawn Care applications, SPECTICLE FLO HERBICIDE may be applied where labeled warm season grasses are adjacent to sensitive grasses such as tall fescue, Kentucky bluegrass, and perennial ryegrass. The applicator, however, must take care not to apply SPECTICLE FLO HERBICIDE directly to sensitive grasses.

If SPECTICLE FLO HERBICIDE contacts sensitive grasses, refer to the "DEACTIVATING SPECTICLE FLO HERBICIDE" section of this label.

USE RATES, TIMINGS, AND MAXIMUM SEASONAL RATE FOR SPECTICLE FLO HERBICIDE ON TURF

Apply SPECTICLE FLO HERBICIDE in a single or split application program. The maximum single application rate of SPECTICLE FLO HERBICIDE is 10 fl oz per acre. The total amount of SPECTICLE FLO HERBICIDE applied in a 12-month period must not exceed 18.5 fl oz per acre.

SINGLE APPLICATION PROGRAM

Use higher rates within the rate range when the site has historically higher weed pressure or when longer residual control is desired. Use lower to medium rates on medium and coarse-textured soils, and higher rates on fine-textured soils.

Use Rates for Single Application of SPECTICLE FLO HERBICIDE

Target Weed		Rate Range (fl oz per acre) for SPECTICLE FLO (single application)
Crabgrass	Broadleaf weeds	6-10
Goosegrass	Annual sedge and annual kyllinga	
Annual bluegrass		

SPLIT APPLICATION PROGRAMS

Split applications of SPECTICLE FLO HERBICIDE can be made in a use season to extend the length of control of specific weeds, to control weeds germinating over an extended period, or to control other weeds emerging during the same or overlapping period.

Use Rates for Split Applications of SPECTICLE FLO HERBICIDE

Target Weed	Rate Range (fl oz per acre) for SPECTICLE FLO HERBICIDE (initial application)	Rate Range (fl oz per acre) for SPECTICLE FLO HERBICIDE (follow-up application within 45-90 days)
Crabgrass	3 - 9	3 - 9
Goosegrass		
Annual bluegrass		3 - 9
Broadleaf weeds	6 - 9	3 - 9
Annual sedge and annual kyllinga		6 - 9

For extended residual control, use split applications.

Use Rates for Three Split Applications of SPECTICLE FLO HERBICIDE

Target Weed	Rate Range (fl oz per acre) for SPECTICLE FLO HERBICIDE (initial application)	Rate Range (fl oz per acre) for SPECTICLE FLO HERBICIDE (follow-up application within 30-45 days)	Rate Range (fl oz per acre) for SPECTICLE FLO HERBICIDE (follow-up application within 30-45 days)
Crabgrass	3 - 4.5	3 - 4.5	3 - 4.5
Goosegrass			
Annual Bluegrass			
Broadleaf weeds			

GOOSEGRASS CONTROL

SPECTICLE FLO HERBICIDE provides preemergence control of goosegrass emerging from seed. SPECTICLE FLO HERBICIDE does not control perennial goosegrass or goosegrass emerging from existing crowns. If goosegrass is evident at the time of application, use a labeled postemergence herbicide for control of existing plants.

ANNUAL BLUEGRASS CONTROL

Make preemergence applications of SPECTICLE FLO HERBICIDE between August and November depending on annual bluegrass germination in each geographical zone. The optimum timing is dependent on peak annual bluegrass germination and local conditions in a particular year.

BROADLEAF WEED CONTROL

SPECTICLE FLO HERBICIDE provides preemergence control of many broadleaf weeds. Control is affected by the size of the seed and the depth of the seed within the soil profile. Large seeded broadleaf weeds or weeds germinating deeper in the soil profile may not be effectively controlled by SPECTICLE FLO HERBICIDE.

ANNUAL SEDGES AND ANNUAL KYLLINGA CONTROL

SPECTICLE FLO HERBICIDE provides preemergence control of sedges and kylingas emerging from seed. SPECTICLE FLO HERBICIDE does not control established perennial sedges and kyllinga, or sedges emerging from tubers (nutlets) including yellow or purple nutsedge.

Dormant, Non-Overseeded Turf

Tank-mix combinations of SPECTICLE FLO HERBICIDE with a non-selective herbicide will control existing weeds in dormant warm season grasses such as bermudagrass and zoysiagrass.

SPECTICLE FLO HERBICIDE may be used in combination with RONSTAR® FLO HERBICIDE, REVOLVER HERBICIDE, CELSIUS® WG HERBICIDE or TRIBUTE TOTAL to provide broad-spectrum residual weed control. Follow use restrictions on all labels.

Non-Dormant, Non-Overseeded Turf

SPECTICLE FLO HERBICIDE cannot be used on warm season turf overseeded with cool season grasses. Tank-mix combinations of SPECTICLE FLO HERBICIDE with a selective postemergence herbicide such as REVOLVER HERBICIDE, CELSIUS WG HERBICIDE, or TRIBUTE TOTAL provide pre and postemergence control of weeds in non-overseeded, warm season turf common to both products. Follow use restrictions on all labels.

Weeds Controlled or Suppressed by SPECTICLE FLO HERBICIDE[2]			
Broadleaf Weeds			
American black nightshade	*Solanum americanum*	Dodder*	*Cuscuta* spp.
American burnweed (Fireweed)	*Erechtites hieraciifolia*	Dogfennel	*Eupatorium capillifolium*
Beggarticks	*Bidens alba*	Eclipta	*Eclipta alba*
Bittercress	*Cardamine* spp.	Evening primrose, Common	*Oenothera biennis*
Black medic[1]	*Medicago lupulina*	Evening primrose, Cutleaf	*Oenothera laciniata*
Buckwheat, Wild	*Polygonum convolvulus*	False chamomile[1]	*Matricaria maritima*
California burclover	*Medicago polymorpha*	Filaree, Redstem	*Erodium cicutarium*
Canada thistle, Common	*Circium arvense*	Florida pusley	*Richardia scabra*
Chamberbitter	*Phyllanthus urinaria*	Galinsoga	*Galinsoga parviflora*
Chickweed, Common	*Stellaria media*	Garden spurge	*Chamaesyce hirta*
Chickweed, Mouse-ear	*Cerastium vulgatum*	Groundsel, Common	*Senecio vulgaris*
Clover, White	*Trifolium repens*	Hairy fleabane	*Erigeron bonariensis*
Corn speedwell	*Veronica arvensis*	Hairy nightshade	*Solanum sarrachoides*
Cudweed, Linear-leaf/Purple	*Gnaphalium purpureum*	Henbit	*Lamium amplexicaule*
Cupid's shaving brush	*Emilia fosbergii*	Kochia	*Kochia scoparia*
Curly dock	*Rumex crispus*	Lambsquarters, Common	*Chenopodium album*
Dandelion, Cat's Ear	*Hypochoeris radicata*	Lawn burweed	*Soliva sessilis*
Dandelion, Common	*Taraxacum officinale*	Little mallow	*Malva parviflora*

continued

Weeds Controlled or Suppressed by SPECTICLE FLO HERBICIDE[2] *(continued)*			
Broadleaf Weeds			
London rocket[1]	*Sisymbrium irio*	Redmaids	*Calandrinia ciliata*
Longstalked phyllanthus	*Phyllanthus tenellus*	Sesbania, Hemp[1]	*Sesbania exaltata*
Mustard, Black[1]	*Brassica nigra*	Shepherd's-purse	*Capsella bursa-pastoris*
Mustard, Short-pod	*Hirschfeldia incana*	Sida, Prickly/Teaweed[1]	*Sida spinosa*
Mustard, Wild	*Sinapis arvensis*	Southern brassbuttons[1]	*Cotula australis*
Parthenium	*Parthenium hysterophorus*	Sowthistle, Annual	*Sonchus oleraceus*
Pigweed, Prostrate	*Amaranthus blitoides*	Spurge, Spotted	*Euphorbia maculata*
Pigweed, Redroot	*Amaranthus retroflexus*	Stinkwort	*Dittrichia graveolens*
Pink purslane	*Claytonia sibirica*	Sunflower[1], Common	*Helianthus annuus*
Plantain, Buckhorn	*Plantago lanceolata*	Swinecress	*Coronopus didymus*
Plantain, Paleseed	*Plantago virginica*	Tassel flower	*Emilia sonchifolia*
Poinsettia, Wild	*Euphorbia cyathophora*	Tropic ageratum	*Ageratum conyzoides*
Prostrate knotweed	*Polygonum aviculare*	Velvetleaf[1]	*Abutilon theophrasti*
Prostrate spurge	*Euphorbia maculata*	Vetch, Purple	*Vicia benghalensis*
Puncturevine	*Tribulus terrestris*	Wild carrot[1]	*Daucus carota*
Purslane, Common	*Portulaca oleracea*	Willowherb	*Epilobium brachycarpum*
Ragweed, Common[1]	*Ambrosia artimisiifolia*	Woodsorrel, Yellow[1]	*Oxalis stricta*
GRASSES, MONOCOTS, AND SEDGES			
Annual bluegrass	*Poa annua*	Foxtail brome	*Bromus rubens*
Annual kyllinga[3]	*Cyperus sesquiflorus*	Foxtail, Giant	*Setaria faberi*
Barnyardgrass, Common	*Echinochloa crus-galli*	Foxtail, Green	*Setaria viridis*
Cheatgrass	*Bromus secalinus*	Foxtail, Yellow	*Pennisetum glaucum*
Crabgrass, Blanket	*Digitaria serotina*	Goosegrass	*Eleusine indica*
Crabgrass, Henry	*Digitaria ciliaris*	Guineagrass	*Panicum maximum*
Crabgrass, Large/Hairy	*Digitaria sanguinalis*	Kyllinga, Fragrant/Annual[3]	*Kyllinga odorata*
Crabgrass, Smooth	*Digitaria ischaemum*	Little barley	*Hordium pusillum*
Doveweed	*Murdannia nudiflora*	Mouse barley	*Hordeum murinum*
Fall panicum	*Panicum dichotomiflorum*	Red brome	*Bromus rubens*

continued

Weeds Controlled or Suppressed by SPECTICLE FLO HERBICIDE[2] *(continued)*			
GRASSES, MONOCOTS, AND SEDGES			
Rice flatsedge[3]	*Cyperus iria*	Sedge, Annual[3]	*Cyperus compressus*
Ryegrass, Italian	*Lolium multiflorum*	Sedge, Globe[3]	*Cyperus croceus*
Ryegrass, Perennial	*Lolium perenne*	Tufted lovegrass	*Eragrostis pectinacea*
Sandbur	*Cenchrus longispinus*		

*Not for use in California

[1] Weeds suppressed by SPECTICLE FLO HERBICIDE

[2] Use higher labeled rates if weed pressure is historically high or longer residual control is desired (See Use Rates in the SPECTICLE FLO HERBICIDE chart). The rate used must not exceed the tolerance for an individual turf type. Weed control can also be achieved with multiple applications of SPECTICLE FLO HERBICIDE. Do not exceed a total of 18.5 fl oz per acre per year with split applications.

[3] SPECTICLE FLO HERBICIDE only controls sedges and annual kyllinga emerging from seed. It does not control perennial sedge emerging from nutlets or perennial forms of kyllinga.

Seeding, Overseeding, Re-Seeding, Sprigging and Sodding

SPECTICLE FLO HERBICIDE can inhibit root development, as well as the emergence of seed. Roots of newly emerged seedlings may be damaged. Establishment of sod may be affected if SPECTICLE FLO HERBICIDE is applied to sod that is not well established. Timing of seeding, re-seeding, overseeding, sprigging, and sodding turf relative to an application of SPECTICLE FLO HERBICIDE needs to be considered.

Seeding, overseeding, re-seeding, sprigging, and sodding intervals are affected by the rate of SPECTICLE FLO HERBICIDE applied, rainfall, and soil texture in a given year. Applications made sooner than the suggested intervals may decrease the establishment of the new seedlings and reduce turf coverage.

PLANTING METHOD	MINIMUM INTERVAL BEFORE APPLICATION	MINIMUM INTERVAL AFTER APPLICATION	MINIMUM INTERVAL AFTER APPLICATION
		3 - 6 FL OZ/A	> 6 - 10 FL OZ/A
Seeding	12 months	10 months	12 months
Sprigging	12 months	10 months	12 months
Sodding	4 months	6 months	8 months

APPLICATIONS ON SOD FARMS

SPECTICLE FLO HERBICIDE may be applied to turf on Bermudagrass, zoysiagrass, and bahiagrass sod farms. During new sod establishment, SPECTICLE FLO HERBICIDE may be applied when coverage from ribbons is 80% or greater.

Do not apply SPECTICLE FLO HERBICIDE to centipedegrass, seashore paspalum, or St. Augustinegrass sod.

SPECTICLE FLO HERBICIDE may be applied to sod up to 4 months prior to harvest.

LANDSCAPE ORNAMENTALS

SPECTICLE FLO HERBICIDE may be applied for preemergence weed control in landscape ornamentals, and hedgerows. Apply SPECTICLE FLO HERBICIDE as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing landscape ornamentals as listed in the table below. Apply SPECTICLE FLO HERBICIDE to established landscape ornamentals.

USE RESTRICTIONS

- Do not exceed the maximum single application rates specified for each landscape ornamental use.
- Do not allow spray to contact foliage of desirable plant(s). SPECTICLE FLO HERBICIDE may cause localized injury to the foliage, especially young leaf tissue. If the spray contacts the foliage, wash off immediately. See specific label instructions for over-the-top applications.
- Do not use SPECTICLE FLO HERBICIDE on or around annuals not listed as tolerant on this label.
- Do not use SPECTICLE FLO HERBICIDE around bearing fruit and nut trees. SPECTICLE FLO HERBICIDE may be used around non-bearing fruit and nut trees. Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use SPECTICLE FLO HERBICIDE around non-bearing fruit and nut trees unless they are at least 1 year old (citrus), 5 years old (grape vines) and 3 years old (all others).
- Do not use SPECTICLE FLO HERBICIDE within the dripline of bearing fruit and nut trees.
- Do not cultivate or disturb the soil surface after application of SPECTICLE FLO HERBICIDE as this may reduce weed control.
- If transplanting mature plants listed as tolerant on this label into soil treated with SPECTICLE FLO HERBICIDE within the preceding 12 months, replace existing soil around roots to minimize effects on plant establishment.
- Do not use SPECTICLE FLO HERBICIDE on seedbeds, or rooted cuttings.
- Do not apply SPECTICLE FLO HERBICIDE to landscapes ornamentals growing in containers smaller than 15 gallons.
- Do not apply SPECTICLE FLO HERBICIDE over-the-top to landscape ornamentals. For Natural Areas, see label instructions for over-the-top applications.
- Do not mix with products containing chlorine bleach.
- Do not apply to landscape beds uphill from ryegrass, fescue, bentgrass, or mixed lawns where these grasses are desirable.

USE PRECAUTIONS

- Avoid applying SPECTICLE FLO HERBICIDE to heavily mulched landscape beds, as reduced weed control may occur. For best results remove existing mulch and replace mulch after an application of SPECTICLE FLO HERBICIDE.
- Application of SPECTICLE FLO HERBICIDE to budded grafts or graft unions may cause plant injury or plant death.

USE OF SPECTICLE FLO HERBICIDE ON LANDSCAPE ORNAMENTALS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of landscape ornamentals to SPECTICLE FLO HERBICIDE. Excessively coarse or sandy soils may allow for downward movement of SPECTICLE FLO HERBICIDE into the root zone and cause significant root damage and phytotoxicity. Coarse soils, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of SPECTICLE FLO HERBICIDE on these soils, confirm soil texture with a soil test. Landscape ornamentals grown in soil exceeding 90% sand or 20% gravel may be at risk. If SPECTICLE FLO HERBICIDE is to be applied in these soils, evaluate tolerance of a few plants of each landscape ornamental in SPECTICLE FLO HERBICIDE treated soil for 1-2 months prior to a large scale application.

SYMPTOMS OF SPECTICLE FLO HERBICIDE INJURY ON LANDSCAPE ORNAMENTALS

SPECTICLE FLO HERBICIDE may injure sensitive landscape ornamentals by damaging roots or leaves. Plant foliage damaged by root absorption will appear stunted, deformed, and may not recover. If SPECTICLE FLO HERBICIDE is allowed to contact leaves, leaf symptoms including leaf spot, leaf discoloration, and leaf curl may appear. Symptoms appear within several days after application. Leaves formed after appearance of symptoms may recover.

LANDSCAPE ORNAMENTAL USES

SPECTICLE FLO HERBICIDE may be used in residential, commercial, as well as federal, state and local plantings of landscape ornamentals and hedgerows for preemergence weed control. Apply SPECTICLE FLO HERBICIDE as a directed spray around established (rooted) plants and not to newly rooted cuttings or seedlings. To avoid root damage, apply SPECTICLE FLO HERBICIDE around transplants when the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Make applications prior to mulching for best weed control. If SPECTICLE FLO HERBICIDE contacts foliage, wash off immediately to avoid damage. Herbaceous annuals and perennials are sensitive to SPECTICLE FLO HERBICIDE.

Use of SPECTICLE FLO HERBICIDE near Sensitive Grasses

CAUTION: SPECTICLE FLO HERBICIDE applied uphill to sensitive grasses can move, under certain circumstances, to sensitive grasses and cause injury and stand reduction.

AMOUNT TO USE: Apply SPECTICLE FLO HERBICIDE as a broadcast, directed spray at 6-12 fl oz/acre around landscape ornamentals. When applying SPECTICLE FLO HERBICIDE with a backpack sprayer, follow all above restrictions.

A subsequent application of SPECTICLE FLO HERBICIDE can be made within 90 days after the initial application to extend weed control provided that the total SPECTICLE FLO HERBICIDE applied does not exceed 18.5 fl oz per acre in a 12 month period.

COMBINATIONS OF SPECTICLE FLO HERBICIDE WITH NON-SELECTIVE HERBICIDES AROUND LANDSCAPE ORNAMENTALS

Remove existing weed growth before application of SPECTICLE FLO HERBICIDE or use a postemergence herbicide labeled for control. SPECTICLE FLO HERBICIDE may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

When tank-mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state where the application is being made.

IMPORTANT: Direct application of SPECTICLE FLO HERBICIDE to the soil surface. Avoid direct spray contact on plant surfaces, foliage, and green bark. Avoid application under environmental conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of SPECTICLE FLO HERBICIDE.

BACKPACK AND HANDHELD SPRAYER MIXING: SPECTICLE FLO HERBICIDE can be applied using backpack or handheld sprayers. For backpack or handheld spray applications, mix 1 teaspoon of SPECTICLE FLO HERBICIDE per gallon of water. Agitate the mixture to ensure good suspension. If adding glyphosate, mix SPECTICLE FLO HERBICIDE in first. Recommended spray volume is 40 - 100 gallons per acre or approximately 1 - 2.3 gallons per 1000 sq ft.

LANDSCAPE ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO SPECTICLE FLO HERBICIDE

Tolerant landscape ornamentals and their cultivars are listed in the following table. Apply as a directed spray around tolerant landscape ornamentals. If a desired plant to be treated is not listed on this label, treat several plants at the maximum use rate and evaluate 1 - 2 months later for acceptable tolerance. The user assumes responsibility for application to plants not listed on this label. Do not treat annuals that are not listed on this label.

Common Name	Scientific Name	Cultivar
Abelia	*Abelia x grandiflora*	Kaleidoscope
Acacia, Prostrate	*Acacia redolens*	Desert Carpet
Anise, Yellow	*Illicium parviflorum*	
Apple	*Malus domestica*	Beverly Hills, Ellsa, Golden Dorsett, Harelred, Honey Crisp, Mahaleb, Red Delicious, Winesap
Apricot	*Prunus armeniaca*	Tropic Gold
Arborvitae	*Thuja occidentalis*	Emerald, Green Giant, Green Flag, Nigra, Techny, Yellow Ribbon
Ash, (Southern) Green	*Fraxinus pennsylvanica*	Georgia Gem
Asparagus fern	*Asparagus plumosus*	
Aspen, Quaking	*Populus tremuloides*	
Azalea	*Rhododendron* spp.	Delaware Valley White, Fashion, Florida Flame, Girard's Rose, Haps Pink, High Tide, Judge Solomon, Karen, Nova Zembla, Macarantha, Hino Crimson, Mother's Day, Pink Gumpo, Red Ruffle, VF 14, White Gumpo
Azalea	*Rhododendron yakushimanum x smirnowii*	Crete
Azalea, Cat album	*Rhododendron chionoides*	
Azalea, Encore	*Rhododendron* spp.	Autumn Debutante
Bamboo, Golden	*Phyllostachys aurea*	
Beech, American	*Fagus grandifolia*	
Birch, River	*Betula nigra*	Heritage
Birch, White	*Betula platyphylla*	Spire
Bird of Paradise	*Strelitizia reginae*	
Bird of Paradise, White	*Strelitizia nicolai*	
Black tupelo (Black gum)	*Nyssa sylvatica*	Wild Fire
Bluebird	*Caryopteris x clandonensis*	Dark Knight
Bluestem, Big	*Andropogon gerardii*	
Bluestem, Little	*Andropogon scoparius*	
Boxwood	*Buxus microphylla*	Baby Gem, Chicagoland Green, Dwarf, Green Beauty
Boxwood	*Buxus isinica var. insularis*	Wintergreen
Boxwood, Common/English	*Buxus sempervirens*	Green Gem, Green Mountain, Suffructicosa, Winter Gem
Boxwood, Japanese	*Buxus microphylla var. japonica*	Dwarf, Chicagoland
Bradford Pear	*Pyrus calleryana*	Chanticlear

continued

continued

Common Name	Scientific Name	Cultivar
Buckeye, Ohio	*Aesculus glabra*	
Burning bush (Euonymus)	*Euonymus altus*	Compacta
Butterfly bush	*Buddleia davidii*	Nanho Blue
Buttonwood	*Conocarpus erectus*	
Camellia, Japanese	*Camellia japonica*	Margaret Heathcliff Pink
Camellia, Little leaf	*Camellia sasanqua*	Cleopatra Pink, Shi Shi Gashira
Cassia (Golden senna)	*Senna surattensis*	
Catalpa, Southern	*Catalpa bignoniaceae*	
Cedar, Atlantic white	*Chamaecyparis thyoides*	
Cedar, Eastern red	*Juniperus virginiana*	Burkii, Idylllwild
Cedar, Japanese	*Cryptomeria japonica*	Black Dragon, Burkii, Globosa, Yoshino
Cherry, American plum	*Prunus americana*	
Cherry	*Prunus serrulata*	Kwanzan
Cherry, Purple leaf sand	*Prunus cistena*	
Cherry, Sargent	*Prunus sargentii*	Spring Wonder
Cherry, Yoshino	*Prunus x yedoensis*	Yoshino
Cherry Laurel (Skip laurel)	*Prunus laurocerasis*	Otto Luyken, Schipkaensis
Chokeberry	*Aronia prunifolia*	Viking
Cottonwood, Eastern	*Populus deltoides*	Siouxland
Crabapple	*Malus sylvestris*	Harvest Gold, Snowdrift, Snow Spring, Spring Snow
Crape myrtle	*Laegerstroemia indica*	Burgundy Cotton, Pocomoke Pink, Sarah's Favorite, Siren Red
Crape myrtle	*Lagerstroemia indica x fauriei*	Miami, Muskogee, Tuscarora
Cryptomeria	*Cryptomeria japonica*	Black Dragon, Yoshino
Cypress, Bald	*Taxodium distichum*	Shawnee Brave
Cypress, False	*Chamaecyparis* spp.	Gold Mops, Gold Thread
Cypress, Japanese (Hinoki cypress)	*Chamaecyparis obtusa*	Filicoides
Cypress, Leyland	*Cupressus x leylandii*	
Cypress, Mediterranean	*Cupressus sempervirens*	
Cypress, Pond	*Taxodium distichum var. imbricatum*	
Daphne	*Daphne caucasica*	Summer Ice
Dawn Redwood	*Metasequoia glyptostroboides*	

continued

continued

Common Name	Scientific Name	Cultivar
Dogwood, Flowering	*Cornus florida*	
Dogwood, Kousa	*Cornus kousa*	
Dogwood, Redosier (Red bark)	*Cornus sericea*	Yellow Twig
Dogwood, Tatarian	*Cornus alba*	
Elm, American	*Ulmus americana*	
Elm, Chinese (Bosque)	*Ulmus parvifolia*	Drake
Eucalyptus	*Eucalyptus globulus*	Baby Tears
Feather reed grass	*Calamagrostis x acutiflora*	Overdam, Karl Foerster
Fir, Frasier	*Abies fraseri*	
Florida Leucothe (Pipestem)	*Leucothoe populifolia*	
Forsythia (Golden bells)	*Forsythia x intermedia*	Lynwood (Lynwood Gold)
Fragrant tea olive	*Osmanthus fragrans*	
Gardenia	*Gardenia radicans*	
Gardenia	*Gardenia jasminoides*	Frostproof, Mystery
Gaura	*Gaura lindheimeri*	Pink Fountain
Ginkgo	*Ginkgo biloba*	
Gold-dust plant	*Aucuba japonica*	Gold Dust
Green ash	*Fraxinus pennsylvanica*	Georgia Gem
Gumbo-limbo (Copperwood)	*Bursera simaruba*	
Hardy Kiwi	*Actinidia arguta*	Anna
Hawthorn, One seeded	*Crataegus monogyna*	Winter King
Hemlock, Eastern	*Tsuga canadensis*	
Hibiscus, Chinese	*Hibiscus rosa-sinensis*	President Red, San Diego Red
Holly, American	*Ilex opaca*	
Holly, Chinese	*Ilex cornuta*	Burfordii Nana, Carissa, Dwarf Burford, Needlepoint
Holly, Dragon lady	*Ilex x aquipernyi*	Dragon Lady
Holly, Dwarf yaupon	*Ilex vomitoria*	Compacta , Schillings, Stoke's Dwarf
Holly, Foster	*Ilex x attenuata*	East Palatka, Fosteri
Holly, Inkberry/Gallberry	*Ilex glabra*	Compacta, Densa, Shamrock
Holly, Japanese	*Ilex crenata*	Green Luster, Sky Pencil, Soft Touch
Holly, Meservae	*Ilex meserveae*	Blue Maid, Blue Princess
Holly, Nellie R. Stevens	*Ilex aquifolium x Ilex cornuta*	Nellie R. Stevens

continued

continued

Common Name	Scientific Name	Cultivar
Holly, Winterberry	*Ilex verticillata*	Jim Dandy, Red Sprite
Honeylocust	*Gleditsia triacanthos*	Sunburst, Sunshine
Hornbeam, European	*Carpinus betulus*	Frans Fontaine
Hornbeam, Hop	*Ostrya virginiana*	Carolina
Indian Hawthorn	*Rhaphiolepsis indica*	Dwarf Pink, Minor, Pink Lady
Japanese cleyera	*Ternstromia gymnanthera*	
Jasmine, Asiatic/Yellow star	*Trachelospermum asiaticum*	Minima
Jasmine, Winter	*Jasminum nudiflorum*	
Juniper, Chinese	*Juniperus chinensis*	Gold Tip, Grey Owl, Sea Green, Spartan
Juniper, Common	*Juniperus communis*	
Juniper, Creeping	*Juniperus horizontalis*	Bar Harbor, Blue Rug
Juniper, Flaky	*Juniperus squamata*	Blue Star
Juniper, Parson's	*Juniperus davurica*	Expansa, Parsonii
Juniper, Shore	*Juniperus conferta*	Blue Pacific
Juniper (Red Cedar)	*Juniperus virginiana*	Brodie, Burkii
Lantana	*Lantana camara*	Landmark Sunrise Rose
Larch, Common	*Larix decidua*	
Laurustinus	*Viburnum tinus*	
Lilac	*Syringa x 'Penda'*	Bloomerang
Lilac, Common	*Syringa vulgaris*	
Liriope (Lilyturf)	*Liriope muscari*	Aztec Grass, Big Blue, Evergreen Giant, Silvery Sunproof
London plane tree	*Plantanus x acerifolia*	Exclamation
Loropetalum	*Loropetalum chinensis*	Burgundy, Emerald Snow, Plum Purple, Rubra, Ruby
Maiden Grass (Eulaliagrass)	*Miscanthus sinensis*	Gracillimus, Zebrinus, Little Zebra
Magnolia, Jane	*Magnolia liliflora x M. stellata*	
Magnolia, Southern	*Magnolia grandiflora*	Bracken's Brown Beauty
Mahogony, West Indies/American	*Swietenia mahagoni*	
Maple, Autumn blaze	*Acer x freemanii*	Jeffersred
Maple, Japanese	*Acer palmatum*	Bloodgood, Weeping Red Dragon
Maple, Red	*Acer rubrum*	Autumn Blaze, Autumn Radiance, Frank's Red, October Glory, Red Sunset
Mondograss	*Ophiopogon japonicus*	

continued

continued

Common Name	Scientific Name	Cultivar
Muhly Grass	*Muhlenbergia capillaris*	
Nandina	*Nandina domestica*	Firepower
Oak, Northern pin	*Quercus ellipsoidal*	
Oak, Northern red	*Quercus rubra*	
Oak, Nuttal	*Quercus nuttallii*	
Oak, Pin	*Quercus palustris*	
Oak, Prairie stature	*Quercus x bimundorum*	Midwest
Oak, Shumard	*Quercus shumardii*	
Oak, Southern live	*Quercus virginiana*	Cathedral
Oak, White	*Quercus alba*	Swamp White
Ohio buckeye	*Aesculus glabra*	
Orchid Tree, Hong Kong	*Bauhinia blakeana*	
Palm, Bamboo/Reed	*Chamaedorea seifrizzi*	
Palm, Cat	*Chamaedorea cataractarum*	
Palm, Chinese Fan	*Livistona chinensis*	
Palm, Christmas	*Adonidia merrillii*	
Palm, Areca	*Dypsis lutescens*	
Palm, Coconut	*Cocos nucifera*	
Palm, European (Mediterranean) fan	*Chamaerops humilis*	
Palm, Foxtail	*Wodyetia bifurcata*	
Palm, Majesty	*Ravenea rivularis*	
Palm, Pygmy date	*Phoenix roebelenii*	
Palm, Queen	*Syagrus romanzoffiana*	
Palm, Roebelenii	*Phoenix roebelenii*	
Palm, Royal	*Roistonea regia*	
Palm, Triangle	*Dypsis decaryi*	
Palm, King Sago	*Cycas revoluta*	
Pear, Callery	*Pyrus calleryana*	Bradford Pear, Chanticleer
Pieris (Lily-of-the-Valley shrub, Japanese andromeda)	*Pieris japonica*	Mountain Fire, Red Mill, Shojo
Pine, Black	*Pinus nigra*	
Pine, Eastern white	*Pinus strobus*	

continued

continued

Common Name	Scientific Name	Cultivar
Pine, Scots	*Pinus sylvestris*	
Pittosporum (Japanese Pittosporum)	*Pittosporum tobira*	Variegata
Pistache, Texas	*Pistacia texana*	
Plum, American	*Prunus americana*	
Plum, Crimson pointe	*Prunus x cerasifera*	
Podocarpus (Buddhist pine)	*Podocarpus macrophyllus*	
Prairie Cordgrass	*Spartina pectinata*	
Privet	*Ligustrum ovafolium*	
Privet, Vicary	*Ligustrum x vicary*	
Redbud, Eastern	*Cercis canadensis*	MN Strain
Rhododendron	*Rhododendron* spp.	
Rose	*Rosa* spp.	Caramba , Double Knock Out®, Flower Carpet Amber, Home Run, Knock Out®, Louis Phillipe, Pink Knock Out®, Radrazz
Rose	*Rosa odorata*	Belinda's Dream, Blue Girl, Double Delight, John F. Kennedy, Mister Lincoln
Rose	*Rosa wichurana*	Dr. Huey
Rose, Virginia	*Rosa virginiana*	
Rose mallow	*Hibiscus moscheutos*	
Rose of Sharon	*Hibiscus syriacus*	Pink Heart, Boule de Feu
Russian sage	*Perovskia atriplicifolia*	
Seagrape	*Coccoloba uvifera*	
Skip laurel	*Prunus laurocerasis*	
Snowberry, Common	*Symphoricarpos albus*	
Spicebush	*Lindera benzoin*	
Spirea (dormant only)	*Spiraea japonica*	Lemon Princess, Little Princess, Norman, Shirobana
Spruce, Blackhills (White spruce)	*Picea glauca*	Densata
Spruce, Colorado Blue (Blue spruce)	*Picea pungens*	
Spruce, Norway	*Picea abies*	
Sweetgum	*Liquidambar styraciflua*	Happidaze
Tamarisk	*Tamarix ramosissima*	Pink Cascade
Taxus (English/Common yew)	*Taxus baccata*	
Taxus (Japanese Yew)	*Taxus cuspidata*	Capitada

continued

continued

Common Name	Scientific Name	Cultivar
Thin-fruit sedge	*Carex flaccosperma*	
Viburnum, Burkwood	*Viburnum x burkwoodii*	
Viburnum (Wayfaring Tree)	*Viburnum lantana*	Mohican
Viburnum, Popcorn (Japanese snowball)	*Viburnum plicatum*	Popcorn, St. Keverne
Waxflower	*Chamelaucium* spp.	
Wax myrtle, Southern (w/ woody growth)	*Myrica cerifera*	
Willow, Variegated	*Salix integra*	Hakuro Nishiki
Yellow Indian grass	*Sorghastrum nutans*	

Do not use SPECTICLE FLO HERBICIDE on any of these plants.

Common Name	Scientific Name
Blue fescue grass	*Festuca glauca*
Croton	*Codiaeum variegatum*
Fountain grass	*Pennisetum alopecuroides*
Fountain grass, Purple	*Pennisetum setaceum*
Hydrangea	*Hydrangea macrophylla*
Sweet Viburnum	*Viburnum odoratissimum*
Viburnum	*Viburnum suspensum*

NATURAL AREAS

Use SPECTICLE FLO HERBICIDE to control weeds in managed natural areas on golf courses. These areas can be adjacent to fairways, tees, greens, and in steep areas that are difficult to manage with a traditional program or where low maintenance is desired. Plants in these areas include those indigenous to a geographic area as well as other plants introduced due to their potential for low maintenance or for aesthetic considerations. Use of SPECTICLE FLO HERBICIDE in natural areas allows the user to manage undesirable weeds and prevent germination of invasive plants.

Apply SPECTICLE FLO HERBICIDE as a directed spray around tolerant landscape ornamentals listed on this label to control annual grasses and broadleaf weeds prior to germination. In situations where vegetation is too thick for a directed spray application, over-the-top application is necessary. For over-the-top applications, all plants must be established for at least one growing season before an application of SPECTICLE FLO HERBICIDE. If a desired plant to be treated is not listed on this label, treat several plants at the maximum use rate and evaluate 1 - 2 months later for acceptable tolerance to over-the-top applications.

Germination of wildflower seed will be sensitive to SPECTICLE FLO HERBICIDE. Seed these into treated areas no sooner than 12 months after an application of SPECTICLE FLO HERBICIDE. Do not make an over-the-top application to wildflowers.

For control of undesirable grasses and broadleaf weeds present in areas to be treated, use a postemergence spot application of Acclaim Extra, or Celsius according to their labels.

AMOUNT TO USE: Apply SPECTICLE FLO HERBICIDE as a broadcast directed spray at 9 - 12 fl oz/A around landscape ornamentals. Apply 6 - 9 fl oz/A as an over-the-top application. Recommended spray volume is 40 - 80 gallons per acre or approximately 1 - 2 gallons per 1000 sq ft. Activate SPECTICLE FLO HERBICIDE by watering in with light irrigation or rainfall.

NON-SELECTIVE USES

NON-CROP AREAS

SPECTICLE FLO HERBICIDE may be used to maintain bare ground in non-crop areas. These include paths, parking lots, curbs, sidewalks, driveways, around buildings, gravel areas, loading ramps, educational facilities, storage yards, vacant lots, fence rows, parks, and hardscapes. All weeds and debris must be removed from these areas to be treated for optimum control. Adequate irrigation or rainfall after application of SPECTICLE FLO HERBICIDE will provide maximum weed control.

Use of SPECTICLE FLO HERBICIDE near Sensitive Grasses

SPECTICLE FLO HERBICIDE applied uphill to sensitive grasses can move, under certain circumstances, to sensitive grasses and cause injury and stand reduction.

AMOUNT OF USE: Apply 9 - 18.5 fl oz of SPECTICLE FLO HERBICIDE per acre. Use a minimum spray volume of 10 gallons per acre. If weeds are present at the time of application, tank-mix a postemergence herbicide such as glyphosate or glufosinate ammonium with SPECTICLE FLO HERBICIDE. Observe all use restrictions on this label and on the label of the tank-mix partner.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE

Store in original container and keep tightly closed when not in use. Store in a cool, dry place. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL

Pesticides wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or Hazardous Waste representative at the nearest EPA regional office for guidance in proper disposal methods.

CONTAINER HANDLING

Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

continued

STORAGE AND DISPOSAL *(continued)*

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Rigid Non-Refillable containers with capacities smaller or equal to 5 gallons

PLASTIC CONTAINERS:

Non-refillable container. Do not reuse or refill this container. Tripled rinse container (or equivalent) promptly after emptying.

LIQUID Dillutable formulations:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

Bayer

INDAZIFLAM | GROUP 29 | HERBICIDE

Spect(i)cle® FLO HERBICIDE

Preemergence Herbicide for the Control of Grasses, Annual Sedges and Broadleaf Weeds in Warm Season Turfgrass, Landscape Ornamentals, Hedgerows, Hardscapes, and Natural Areas
DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

ACTIVE INGREDIENT: Indaziflam	7.4%
OTHER INGREDIENTS:	92.6%
TOTAL:	100.0%

This product is a Suspension Concentrate containing 0.622 lb active ingredient per gallon. **Shake well before use.**
EPA Reg. No. 432-1608

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

See Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

FIRST AID

If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Net Contents
1 Gallon
86775387
86699648C 200831AV1

Bayer

(01)00785740640876

PULL HERE TO OPEN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name	SPECTICLE® FLO HERBICIDE
Product code (UVP)	80193424, 85850822
SDS Number	102000025126
EPA Registration No.	432-1608

Relevant identified uses of the substance or mixture and uses advised against

Use	Herbicide
Restrictions on use	See product label for restrictions.

Information on supplier

Supplier	Bayer Environmental Science 2 T.W. Alexander Drive Research Triangle PK, NC 27709 USA
Responsible Department	Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days)	1-800-334-7577
Product Information Telephone Number	1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Acute toxicity(Inhalation): Category 4
Specific target organ toxicity - repeated exposure: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200

Signal word: Warning

Hazard statements
Harmful if inhaled.
May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Precautionary statements

Do not breathe spray.
Do not breathe mist.
Use only outdoors or in a well-ventilated area.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)
No health hazards not otherwise classified.
No physical hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Indaziflam	950782-86-2	7.4
1,2-Propanediol	57-55-6	8.36

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Skin contact Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Water spray, Foam, Carbon dioxide (CO2), Dry chemical
Unsuitable	None known.
Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Flash point	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.
Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Indaziflam	950782-86-2	0.56 mg/m3 (TWA)		OES BCS*
1,2-Propanediol (Aerosol.)	57-55-6	10 mg/m3 (TWA)	2010	WEEL

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Tightly fitting safety goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white to beige
Physical State	Liquid
Odor	characteristic
Odour Threshold	No data available
pH	5.0 - 8.0 at 10 % (23 °C) (deionized water)
Vapor Pressure	No data available
Vapor Density (Air = 1)	No data available
Density	1.01 g/cm³ at 20 °C
Evaporation rate	No data available
Boiling Point	No data available
Melting / Freezing Point	No data available
Water solubility	soluble
Minimum Ignition Energy	Not applicable
Decomposition temperature	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity	300 - 900 cps at 25 °C
Flash point	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity	
Thermal decomposition	No data available
Chemical stability	Stable under recommended storage conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	freezing
Incompatible materials	No data available
Hazardous decomposition products	Thermal decomposition can lead to release of: Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride Carbon monoxide Nitrogen oxides (NOx)

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Inhalation, Eye contact, Skin contact
Immediate Effects	
Eye	May cause mild irritation to eyes.
Skin	May cause mild irritation to the skin.

Information on toxicological effects

Acute oral toxicity	LD50 (female Rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (male/female combined Rat) > 2.09 mg/l Exposure time: 4 h Determined in the form of liquid aerosol.
Acute dermal toxicity	LD50 (male/female combined Rat) > 5,000 mg/kg
Skin irritation	slight irritation (Rabbit)
Eye irritation	Minimally irritating. (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – repeated exposure

Indaziflam caused neurobehavioral effects and/or neuropathological changes in subchronic studies in rats and dogs.

Assessment mutagenicity

Indaziflam was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Indaziflam was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Indaziflam was not a primary reproductive toxicant in a two-generation study in rats.

Assessment developmental toxicity

Indaziflam did not cause developmental toxicity in rats and rabbits.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.572 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient indaziflam.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) > 9.88 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient indaziflam.
Toxicity to aquatic plants	IC50 (Raphidocelis subcapitata (freshwater green alga)) 0.134 mg/l Growth rate; Exposure time: 96 h The value mentioned relates to the active ingredient indaziflam.
Biodegradability	Indaziflam: Not rapidly biodegradable
Koc	Indaziflam: Koc: 496
Bioaccumulation	Indaziflam: Bioconcentration factor (BCF) 66 Does not bioaccumulate.
Mobility in soil	Indaziflam: Moderately mobile in soils
Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water. Do not apply when weather conditions favor runoff or drift. Drift or runoff from treated areas may adversely affect non-target plants. Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR	Not dangerous goods / not hazardous material

IMDG

UN number	**3082**
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)

IATA

UN number	**3082**
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification:	COMPOUNDS, TREE OR WEEDKILLING, N.O.I., other than poison; HAVING A DENSITY OF GREATER THAN 20 LBS. PER CUBIC FOOT

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1608
US Federal Regulations
TSCA list
1,2-Propanediol 57-55-6
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
None.
SARA Title III - Section 302 - Notification and Information
None.
SARA Title III - Section 313 - Toxic Chemical Release Reporting
None.
US States Regulatory Reporting
CA Prop65
This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

1,2-Propanediol	57-55-6	MN, RI

Canadian Regulations
Canadian Domestic Substance List
None.

Environmental
CERCLA
None.
Clean Water Section 307 Priority Pollutants
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified

NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 2	Flammability - 1	Instability - 0	Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1	Flammability - 1	Physical Hazard - 0	PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Section 11: Toxicological Information.

Revision Date: 10/02/2017