

An Employee-Owned Company

SAFETY DATA SHEET

Issue Date 16-Mar-2015

Revision Date 08-Mar-2019

Version 4

1. Identification

Product identifier. Product Name

Trimec® Broadleaf Herbicide Bentgrass Formula

Other means of identificationProduct CodePBI FP 8401126EPA Pesticide Registration Number2217-529Product Size2/2.5 U. S. Gal.

Recommended use of the chemical and restrictions on useRecommended UseHerbicideUses advised againstNo information available

 Details of the supplier of the safety data sheet

 Supplier Address
 Comparison

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

Emergency telephone number 24 Hour Emergency Phone Number Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

OSHA Regulatory Status

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

Serious eye damage/eye irritation	Category 2A
Chronic Aquatic Toxicity	Category 3
Flammable liquids	Category 3

Label elements

Emergency Overview

Signal word Warning

Hazard statements

Causes serious eye irritation
Harmful to aquatic life with long lasting effects

Flammable liquid and vapor



Appearance Liquid

Physical state Liquid

Odor Amines

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

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.

The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H; however OSHA HCS 2012 flammable classifications are solely based on tested mixture flash points and boiling points.

Other information

Not applicable

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
MCPP-p Dimethylamine Salt	66423-09-4	9.92
2,4-D, dimethylamine salt	2008-39-1	6.12
Dimethylamine dicamba	2300-66-5	2.53
Trade Secret	Trade secret	0-10*

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

4. First-aid measures

Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation persists.
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	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

	to an unconscious person. Do NOT induce vomiting. Call a physician.				
Self-protection of the first aider	Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.				
Most important symptoms and effe	cts, both acute and delayed				
Symptoms No information available.					
Indication of any immediate medica	al attention and special treatment needed				
Note to physicians	Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.				
	5. Fire-fighting measures				
Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.				
Unsuitable extinguishing media	No information available.				
Specific hazards arising from the chemical	In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating and toxic gases and vapors.				
Explosion data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.				
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.				
	6. Accidental release measures				
Personal precautions, protective ed	uipment and emergency procedures				
Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.				
Environmental precautions					
Environmental precautions	Prevent further leakage or spillage if safe to do so Prevent product from entering drains Do not flush into surface water or sanitary sewer system See Section 12 for additional ecological information				
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.				
Methods and material for containm	ent and cleaning up				
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike fa ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.				
Methods for cleaning up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Use personal protective equipment as required.				
	7. Handling and storage				
Precautions for safe handling					
Advice on safe handling	Use personal protection equipment. Avoid breathing vapors or mists. Use according to				

package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store locked up. Keep out of the reach of children. Keep from freezing.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH		
2,4-D, dimethylamine salt 2008-39-1	TWA: 10 mg/m ³ inhalable fraction S*	Š*			
Trade Secret	STEL: 15 ppm				
	TWA: 5 ppm	TWA: 18 mg/m ³	TWA: 10 ppm		
		(vacated) TWA: 10 ppm	TWA: 18 mg/m ³		
		(vacated) TWA: 18 mg/m ³			
Legend Section 8: EXPOSURE					
TWA TWA (time-wei			erm Exposure Limit)		
Ceiling Maximum limit	value	* Skin designation	on		
Other Information	Vacated limits revoked by (11th Cir., 1992).	the Court of Appeals decision in	AFL-CIO v. OSHA, 965 F.2d 962		
Appropriate engineering contro	ols				
Engineering controls	Showers				
	Eyewash stations				
		Ventilation systems.			
Individual protection measures, such as personal protective equipment					
Eye/face protection	Tight sealing safety goggle	es.			
Hand protection	Wear suitable gloves. Imp	ervious gloves.			
Skin and body protection	Wear suitable protective c	Wear suitable protective clothing. Wear long-sleeved shirt, long pants, socks and shoes.			
Respiratory protection	respiratory protection shour required for high airborne	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 consideration	be allowed out of the work recommended. Wash han	e when using this product. Contar place. Regular cleaning of equip ds before breaks and immediately res or clothing. Wear suitable glo	ment, work area and clothing is y after handling the product.		

9. Physical and chemical properties

Information on basic physical and chemical properties Physical state Liquid

Appearance Color Odor Odor threshold	Liquid Brown to Black Amines No information available	
<u>Property</u> pH Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate	<u>Values</u> 7.5 - 8.5 <35 °F °F 100 °C / 212 °F 54 °C / 129 °F < 1	<u>Remarks • Method</u>
Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure	No data available No data available No data available <17 mm Hg	None known None known
Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature	>1 1.0488 Soluble in water No data available No data available No data available No data available	None known None known None known None known
Other Information Oxidizing properties Liquid Density Bulk density	No information available 8.73 pounds/gallon No information available	

10. Stability and reactivity

Reactivity

No information available

Stability

Stable under recommended storage conditions

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Will not occur.

Conditions to avoid

Keep out of reach of children.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

May emit toxic fumes under fire conditions. Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	May be harmful by inhalation. May cause irritation.

Eye contact Causes serious eye irritation.

Skin contact	May cause irritation. May be harmful in contact with skin.			
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.			
Symptoms related to the physical, chemical and toxicological characteristics				
Symptoms	Redness. Burning. May cause blindness. Itching. Rashes. Hives.			
Acute toxicity				

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Unknown Toxicity

19 % of the mixture consists of ingredient(s) of unknown toxicity
12.45 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
18.57 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
18.57 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
18.57 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
18.57 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

LD50 Dermal VALUE

> 5000 mg/kg (rat)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,4-D, dimethylamine salt	= 625 mg/kg (Rat)	= 2115 mg/kg (Rabbit)	-
2008-39-1			
Dimethylamine dicamba	= 1267 mg/kg (Rat) = 2629 mg/kg	> 2 g/kg (Rabbit) > 2000 mg/kg (-
2300-66-5	(Rat)	Rabbit)	
Trade Secret	= 698 mg/kg (Rat)	= 3900 mg/kg (Rat)	= 4540 ppm (Rat)6 h

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

Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No information available.
Carcinogenicity	The International Agency for Re its Group 2B (limited evidence f chlorophenoxy Herbicides 2,4-D classifiable as to human carcing

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.

Chemical name	ACGIH	IARC	NTP	OSHA
MCPP-p Dimethylamine Salt	-	Group 2B	-	-
66423-09-4				
2,4-D, dimethylamine salt 2008-39-1	-	Group 2B	-	-

Legend

IARC (International Agency for Research on Cancer) Group 2B - Possibly Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Reproductive toxicity

No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ EffectsEyes, Respiratory system, Skin.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade Secret	9: 96 h Pseudokirchneriella subcapitata mg/L EC50	210: 96 h Poecilia reticulata mg/L LC50 static 111 - 125: 96 h Oncorhynchus mykiss mg/L LC50 120: 96 h Oncorhynchus mykiss mg/L LC50 static 127 - 349: 96 h Poecilia reticulata mg/L LC50 semi-static 396: 96 h Brachydanio rerio mg/L LC50 static	EC50 = 26.8 mg/L 15 min	88.7: 48 h Daphnia magna Straus mg/L EC50
Persistence and degrada	ability No information	on available.		
Bioaccumulation	There is no o	data for this product.		
Other adverse effects	No information	on available.		
	13. E	Disposal considerat	tions	
Waste treatment method	<u>s</u>			
Waste from residues/un products	residues/unused Disposal should be in accordance with applicable regional, national and local laws and regulations. Should not be released into the environment.			al and local laws and
Contaminated packaging	Charackaging Do not reuse container, unless specified by the manufacturer.			
US EPA Waste Number	S EPA Waste Number D001, See Section 2: Hazards not otherwise classified (HNOC).			
	14.	Transport informat	tion	
Note: Products under 186 gallons not regulated by DOT. Below are designations for products over 186 gallons. See RQ				
DOT UN/ID no. Proper shipping nam Hazard class Packing group Reportable Quantity Special Provisions Description	9 III (RQ) 2,4-D, dimet 8, 146, 173,	ENTALLY HAZARDOUS S hylamine salt: RQ (lb)= 163 335, IB3, T4, TP1, TP29 ivironmentally hazardous s	4.00= 186 gallons	
<u>TDG</u> UN/ID no. Proper shipping nam Hazard class	UN3082 ENVIRONMI 9	ENTALLY HAZARDOUS S	UBSTANCE, LIQUID, N.O	.S.

Packing group Description	III UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D, dimethylamine salt), 9, III
<u>MEX</u>	UN3082
UN/ID no.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper shipping name	9
Hazard class	274, 331, 335
Special Provisions	III
Packing group	UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D, dimethylamine salt),
Description	9, III
ICAO (air)	UN3082
UN/ID no.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper shipping name	9
Hazard class	III
Packing group	A97, A158, A197
Special Provisions	UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D, dimethylamine salt),
Description	9, III
IATA	UN3082
UN number	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
UN proper shipping name	9
Transport hazard class(es)	III
Packing group	A97, A158, A197
Special Provisions	UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D, dimethylamine salt),
Description	9, III
IMDG	UN3082
UN number	Environmentally hazardous substance, liquid, n.o.s.
UN proper shipping name	9
Transport hazard class(es)	III
Packing group	F-A, S-F
EmS-No.	274, 335, 969
Special Provisions	UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D, dimethylamine salt), 9,
Description	III

15. Regulatory information

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-529

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

Warning Keep out of the reach of children PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if absorbed through skin or if swallowed. Avoid contact with skin. Wear protective eyewear. Environmental Hazards This pesticide is toxic to fish and aquatic invertebrates and 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate. 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

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 %
Dimethylamine dicamba - 2300-66-5	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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
Trade Secret	1000 lb	-	-	Х

<u>CERCLA</u>

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	Extremely Hazardous Substances RQs
2,4-D, dimethylamine salt 2008-39-1	100 lb	-
Trade Secret	1000 lb	-

US State Regulations

U.S. State Right-to-Know Regulations

US State Regulations

	Chemical name	New Jersey	Massachusetts	Pennsylvania
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Dimethylamine dicamba 2300-66-5	Х	-	-
Trade Secret	Х	Х	Х

16. Other information				
<u>NFPA</u>	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical
<u>HMIS</u>	Health hazards 2	Flammability 2	Physical hazards 0	Properties - Personal protection X

Disclaimer

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End of Safety Data Sheet