

SAFETY DATA SHEET

An Employee-Owned Company

Issue Date 24-Apr-2015 Revision Date 13-Jun-2017 Version 3

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

Product identifier

Product Name TRIMEC® 1000 Low Odor Broadleaf Herbicide

Other means of identification

Product Code PBI FP 994-0
EPA Pesticide Registration Number 2217-931

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide.

Uses advised againstNo information available.

Details of the supplier of the safety data sheet

Supplier Manufacturer Company Name

PBI Gordon Corporation
1217 West 12th Street
1217 West 12th Street
Kansas City, MO 64101
Kansas City, MO 64101
Kansas City, MO 64101

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 Inhalation Toxicity - Dusts and Mists	Category 4
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Chronic Aquatic Toxicity	Category 2
Flammable liquids	Category 4

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed. Harmful if inhaled. Causes serious eye damage. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects. Combustible liquid.



Appearance Liquid Physical state Liquid Odor Amines

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- · Use personal protective equipment as required
- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- · Use only outdoors or in a well-ventilated area
- · Contaminated work clothing should not be allowed out of the workplace
- · Wear protective gloves
- Do not breathe dust/fume/gas/mist/vapors/spray
- Avoid release to the environment
- · Keep away from heat/sparks/open flames/hot surfaces. No smoking

Precautionary Statements - Response

- IF exposed or concerned: Get medical advice/attention
- 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
- If skin irritation or rash occurs: Get medical advice/attention
- · Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- · Rinse mouth
- 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.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS. Number	Weight %
Diethanolamine Salt of 2,4-dichlorophenoxyacetic	5742-19-8	34.59
acid		
MCPP-p Dimethylamine Salt	66423-09-4	8.17
Dimethylamine dicamba	2300-66-5	2.68
2,4-D, dimethylamine salt	2008-39-1	1.22
Trade Secret	Proprietary	0-10*

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

4. FIRST AID MEASURES

First aid measures

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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 Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors or decomposition products. 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 aiderUse 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 Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use. Dry chemical. Carbon dioxide (CO2). Water spray (fog). Alcohol resistant foam.

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 Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. 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.

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Methods for cleaning up

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not

eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

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 away from heat.

Incompatible materials Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

	Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Г	2,4-D, dimethylamine salt	TWA: 10 mg/m³ inhalable fraction	TWA: 10 mg/m ³	IDLH: 10 mg/m³, TWA: 10 mg/m³
	2008-39-1	S*	_	
Г	Trade Secret	TWA: 1 mg/m³ inhalable fraction	(vacated) TWA: 3 ppm	TWA: 3 ppm
		and vapor	(vacated) TWA: 15 mg/m ³	TWA: 15 mg/m ³
		S*	-	-

NIOSH IDLH Immediately Dangerous to Life or Health

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 Local and General Ventilation.

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. Wear long-sleeved shirt, long pants, socks

and shoes.

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. Wash contaminated clothing before reuse. 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 Amines

Color Brown Odor threshold No information available

CC (closed cup)

Property Values Remarks • Method

pH 7.5-8.5 Melting point/freezing point <35 °F

Boiling point / boiling range 100 °C / 212 °F

Flash point 63 °C / 145 °F

Evaporation rate < 1

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
No information available
No information available
vapor pressure
<17 mm Hg @78°F

Vapor density >1 Specific Gravity 1.1637

Water solubility Soluble in water

Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
Oxidizing properties

No information available
No information available
No information available
No information available

Other Information

Density 9.71 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 from freezing.

Incompatible materials

Acids.

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 See "Numerical measures of toxicity-product information" in this section.

Eye contact Moderately irritating to the eyes.

Skin Contact Substance may cause slight skin irritation.

Ingestion

See "Numerical measures of toxicity-product information" in this section.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethylamine dicamba 2300-66-5	= 1267 mg/kg (Rat) = 2629 mg/kg (Rat)	> 2 g/kg(Rabbit)	-
2,4-D, dimethylamine salt 2008-39-1	= 625 mg/kg(Rat)	= 2115 mg/kg(Rabbit)	-
Trade Secret	= 0.62 mL/kg (Rat) = 620 µL/kg (Rat)	= 7640 µL/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

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

Sensitization
Germ cell mutagenicity
Carcinogenicity

Not a skin sensitizer. No information available.

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)

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
Diethanolamine Salt of 2,4-dichlorophenoxyacetic acid 5742-19-8		Group 2B		
MCPP-p Dimethylamine Salt 66423-09-4		Group 2B		
2,4-D, dimethylamine salt 2008-39-1		Group 2B		
Trade Secret	A3	Group 2B		Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

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
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Chronic toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated

exposure.

Target Organ EffectsEyes, Respiratory system, Skin.Aspiration hazardNo information available.

Numerical measures of toxicity - Product Information

Unknown Toxicity 9 % of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50 1030 mg/kg (female rats)

 Dermal LD50
 > 5000 mg/kg

 Inhalation LC50
 > 2.06 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

9% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade Secret	7.8: 72 h Desmodesmus subspicatus mg/L EC50 2.1 - 2.3: 96 h Pseudokirchneriella subcapitata mg/L EC50	4460 - 4980: 96 h Pimephales promelas mg/L LC50 flow-through 1200 - 1580: 96 h Pimephales promelas mg/L LC50 static 600 - 1000: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 73 mg/L 5 min EC50 > 16 mg/L 16 h	55: 48 h Daphnia magna mg/L EC50

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

Proper shipping name For package sizes less than 29.79 gallons: product is non-regulated.

For package sizes 29.79 gallons or greater: UN3082, Environmentally Hazardous

Substances, Liquid, N.O.S., 9, PGIII, RQ (2,4-D)

Description The following guidelines apply for domestic ground transport. If shipping by air or ocean,

please contact our Transportation Dept.

PESTICIDES, NOI, INCLUDING DEFOLIANTS, FUNGICIDES, HERBICIDES, OR

INSECTICIDES NMFC 155050-6

If shipped in bulk conatiners (greater than 119 gallons), this product is a Marine Pollutant.

When shipped as a Hazardous Material, label required is Class 9 (Miscellaneous).

Placards required on bulk shipments only.

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-931

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

PBI FP 994-0 TRIMEC® 1000 Low Odor Broadleaf Herbicide

pesticide label:

EPA Pesticide Label

Warning. Keep out of the reach of children. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed.

International Inventories

Not Listed **TSCA 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
Diethanolamine Salt of 2,4-dichlorophenoxyacetic acid				Х						Х
Dimethylamine dicamba				X		Χ				Х
2,4-D, dimethylamine salt				Х			Х		Х	Х
Trade Secret	Х	Х		Х		Х	Х	Х	Х	Х

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	
Trade Secret -	1.0	

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
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)

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)
Diethanolamine Salt of	100 lb		RQ 100 lb final RQ
2,4-dichlorophenoxyacetic acid			RQ 45.4 kg final RQ
5742-19-8			_
2,4-D, dimethylamine salt	100 lb		RQ 100 lb final RQ

		RQ 45.4 kg final RQ
100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
	100 lb	100 lb

US State Regulations

U.S. State Right-to-Know Regulations

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

International Regulations

Mexico - Grade

Moderate risk, Grade 2

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