

SAFETY DATA SHEET

Issue Date 22-Jan-2015

Revision Date 22-May-2017

Version 3

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

Product identifier **Product Name**

Gordon's® All Season Brush-No-More®

Other means of identification **Product Code** PBI FP 783-5 EPA Pesticide Registration Number 2217-775-33955

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 PBI Gordon Corporation 1217 West 12th Street Kansas City, MO 64101 Emergency telephone number **Emergency Telephone** Chemtrec 1-800-424-9300

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

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

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

| Acute dermal toxicity | Category 4 |
|-----------------------------------|-------------|
| Acute Inhalation Toxicity - Gases | Category 3 |
| Serious eye damage/eye irritation | Category 2A |
| Skin Sensitization | Category 1 |
| Aspiration Toxicity | Category 1 |
| Chronic Aquatic Toxicity | Category 2 |

Label elements

Emergency Overview

Danger

Hazard statements

Harmful in contact with skin. Toxic if inhaled. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. May be fatal if swallowed and enters airways.



Appearance Liquid

Physical state Liquid

Odor Esters

Precautionary Statements - Prevention

- 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
- · Wash face, hands and any exposed skin thoroughly after handling
- · Contaminated work clothing should not be allowed out of the workplace
- Avoid release to the environment

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 eye irritation persists: Get medical advice/attention
- · 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 skin irritation or rash occurs: Get medical advice/attention
- 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- · Do NOT induce vomiting
- Collect spillage

Precautionary Statements - Storage

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed

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. Number | Weight % |
|--------------------------------------|-------------|----------|
| Trade Secret | Proprietary | 30-40* |
| 2,4-D, 2-ethylhexyl ester | 1928-43-4 | 9.74 |
| 2,4-DP Ethylhexyl ester | 618446-52-9 | 4.78 |
| 3,6-Dichloro-o-anisic acid (Dicamba) | 1918-00-9 | 1.65 |

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

4. FIRST AID MEASURES

| 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. Immediate medical attention is not required. 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 |

IngestionDo NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse
mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by
mouth to an unconscious person. Call a physician.Self-protection of the first aiderUse personal protective equipment as required.Most important symptoms and effects, both acute and delayedNo information available.Indication of any immediate medical attention and special treatment needed

Note to physicians

May cause sensitization of susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use. Foam. Carbon dioxide (CO2). Dry chemical.

Specific hazards arising from the chemical

In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. 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

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 | 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 contain | ment and cleaning up | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | |
| Methods for cleaning up | Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. | |
| 7 HANDI ING AND STORAGE | | |

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.

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. |
|--------------------|---|
| | |

Incompatible materials None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------------|---|---------------------------|---------------------------------------|
| 2,4-D, 2-ethylhexyl ester | TWA: 10 mg/m ³ inhalable fraction | TWA: 10 mg/m ³ | IDLH: 100 mg/m ³ , TWA: 10 |
| 1928-43-4 | S* | | mg/m ³ |
| NIOSH IDLH Immediately Dangerou | is to Life or Health | | |
| Other Information | Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 96 (11th Cir., 1992). | | |
| Appropriate engineering controls | | | |
| Engineering Controls | Local and General Ventilation. | | |
| Individual protection measures, su | uch as personal protective equipm | ent | |
| 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. | | lied air respirators may be |
| General Hygiene Considerations | When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regu cleaning of equipment, work area and clothing is recommended. | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical state Appearance Color | Liquid Liquid Brown | Odor Odor threshold | Esters No information available |
|---|--|-------------------------|------------------------------------|
| <u>Property</u> pH Melting point/freezing point Boiling point / boiling range | <u>Values</u> Not Available No information available 116 °C / 240 °F | <u>Remarks • Method</u> | |
| Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air | > 94 °C / > 201 °F > 1 No information available | Pensky-Martens Close | d Cup (PMCC) |
| Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity | No information available No information available No information available >1 0.9023 | | |

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

Emulsifiable No information available No information available No information available No information available No information available

Other Information

Density

7.51 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

None known.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product | Information |
|---------|-------------|
| | |

| Chamical Name | Oral L DE0 | Dammal I DE0 | In heletion |
|---------------|------------------------------|---|-----------------|
| Ingestion | See "Numerical measures of t | See "Numerical measures of toxicity-product information" in this section. | |
| Skin Contact | See "Numerical measures of t | See "Numerical measures of toxicity-product information" in this section. | |
| Eye contact | No data available. | | |
| Inhalation | See "Numerical measures of t | oxicity-product information" ir | n this section. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|--------------------|---------------------------------|---------------------|
| Trade Secret | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat)4 h |
| 2,4-D, 2-ethylhexyl ester 1928-43-4 | = 300 mg/kg (Rat) | - | - |
| 3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9 | = 1039 mg/kg (Rat) | > 1 g/kg (Rat)> 2 g/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 | its Group 2B chlorophenox classifiable a and mice did review of 2,4 | on available. onal Agency for Research (limited evidence for Carci ky Herbicides 2,4-D, 2,4-D s to human carcinogenicity | nogenicity in humans.) Th P, MCPP, and MCPA a Cla /.) More current 2,4-D lifeti ects and a recent World He ed that 2,4-D is not a carcin | e US EPA has given the ass D classification (not ime feeding studies in rats ealth Organization (WHO) nogen. The table below |
|---|---|--|--|--|
| Chemical Name | ACGIH | IARC | NTP | OSHA |
| 2,4-D, 2-ethylhexyl ester 1928-43-4 | | 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 | | | | |
| Depreductive texisity | No informatio | n availabla | | |

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

Numerical measures of toxicity - Product Information

| Unknown Toxicity Oral LD50 | 49 % of the mixture consists of ingredient(s) of unknown toxicity 3464 mg/kg body weight |
|--------------------------------|--|
| Dermal LD50 Inhalation LC50 | > 2000 mg/kg body weight > 5.24 mg/L |

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (inhalation-gas)965 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life

50% 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 | | 2.2: 96 h Lepomis | | 4720: 96 h Den-dronereides |
| | | macrochirus mg/L LC50 | | heteropoda mg/L LC50 |
| | | static 2.4: 96 h | | |
| | | Oncorhynchus mykiss mg/L | | |
| | | LC50 static 45: 96 h | | |
| | | Pimephales promelas mg/L | | |
| | | LC50 flow-through | | |
| 2,4-D, 2-ethylhexyl ester | 30: 120 h | 6 - 8.7: 96 h Oncorhynchus | | |
| 1928-43-4 | Pseudokirchneriella | mykiss mg/L LC50 | | |
| | subcapitata mg/L EC50 30: | flow-through 7.8: 96 h | | |
| | 120 h Pseudokirchneriella | Oncorhynchus mykiss mg/L | | |
| | subcapitata mg/L EC50 | LC50 static 11.5: 96 h | | |
| | static | Lepomis macrochirus mg/L | | |
| | | LC50 static | | |

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. |
| US EPA Waste Number | U240 |

14. TRANSPORT INFORMATION

| <u>DOT</u> Proper shipping name | For package sizes less than 136.72 gallons: product is non-regulated. |
|------------------------------------|---|
| Description | For package sizes 136.72 gallons or greater: UN3082, Environmentally Hazardous Substances, Liquid, N.O.S., 9, PGIII, RQ (2,4-D) 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 |
| | In our current available sizes, this product does not qualify as a Hazardous Material. |

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-775-33955

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. Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed. Harmful if absorbed through the skin. Do not get in eyes, on skin or on clothing.

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 |
|----------------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Trade Secret | Х | Х | | Х | | | Х | Х | Х | Х |
| 2,4-D, 2-ethylhexyl ester | | | | Х | | | | | | |
| 3,6-Dichloro-o-anisic acid | | | | Х | | Х | | Х | Х | Х |
| (Dicamba) | | | | | | | | | | |

US Federal Regulations

<u>SARA 313</u>

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 % |
|--|-------------------------------|
| 2,4-D, 2-ethylhexyl ester - 1928-43-4 | 0.1 |
| 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 |
|--|--------------------------------|------------------------|---------------------------|-------------------------------|
| 2,4-D, 2-ethylhexyl ester 1928-43-4 | 100 lb | | | |
| 3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9 | 1000 lb | | | Х |

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) |
|----------------------------|--------------------------|----------------|--------------------------|
| 2,4-D, 2-ethylhexyl ester | 100 lb | | RQ 100 lb final RQ |
| 1928-43-4 | | | RQ 45.4 kg final RQ |
| 3,6-Dichloro-o-anisic acid | 1000 lb | | RQ 1000 lb final RQ |
| (Dicamba) | | | RQ 454 kg final RQ |
| 1918-00-9 | | | - |

US State Regulations

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|----------------------------|------------|---------------|--------------|
| 2,4-D, 2-ethylhexyl ester | Х | | |
| 1928-43-4 | | | |
| 3,6-Dichloro-o-anisic acid | Х | Х | Х |
| (Dicamba) | | | |
| 1918-00-9 | | | |

International Regulations

Mexico - Grade

Moderate risk, Grade 2

| 16. OTHER INFORMATION | | | | | |
|-----------------------|------------------|----------------|--------------------|---------------------------------------|--|
| NFPA | Health hazards 2 | Flammability 1 | Instability 0 | Physical and Chemical | |
| HMIS | Health hazards 2 | Flammability 1 | Physical hazards 0 | Properties - 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