

Issue Date 16-Jul-2019

Revision Date 22-Jul-2019

Version 1

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

Product identifier.

Product Name Vexis Herbicide Granular

Other means of identification

Product Code PBI FP 8423156

EPA Pesticide Registration Number 2217-1024

Product Size 6/2 lb.

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 Address

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. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

| | |
|---|-------------|
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 |
| Carcinogenicity | Category 1A |

Label elements

Emergency Overview

Signal word

Danger

Hazard statements

- Harmful if inhaled
- May cause cancer



Appearance Granules

Physical state Solid

Odor Odorless

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

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

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

| Chemical name | CAS-No | Weight-% |
|---------------|--------------|----------|
| Trade Secret | Trade secret | 0 - 10% |
| Pyrimisulfan | 221205-90-9 | 0.025 |

* 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 exposed or concerned: Get medical advice/attention. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If symptoms persist, call a physician. |
| Skin contact | Wash skin with soap and water. If skin irritation persists, call a physician. |
| Inhalation | Remove to fresh air. Call a physician if irritation persists. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Call a physician. |

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

| | |
|--|---|
| <u>Suitable Extinguishing Media</u> | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|--|---|

| | |
|--|---------------------------|
| <u>Unsuitable extinguishing media</u> | 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 impact None.

Sensitivity to static discharge None.

Special protective equipment for fire-fighters

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. Ensure adequate ventilation, especially in confined areas. Avoid breathing dust/fume/gas/mist/vapors/spray.

Environmental precautions**Environmental precautions**

See Section 12 for additional ecological information

Other information

Refer to protective measures listed in Sections 7 and 8.

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

Avoid generation of dust. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Limits**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|--|--|---|
| Trade Secret | TWA: 0.025 mg/m ³ respirable particulate matter | TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction | IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust |

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA
Ceiling

TWA (time-weighted average)
Maximum limit value

STEL
*

STEL (Short Term Exposure Limit)
Skin designation

Appropriate engineering controls

| | |
|-----------------------------|---|
| Engineering controls | Showers Eyewash stations Ventilation systems. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/face protection | Tight sealing safety goggles. |
| Hand protection | Chemical resistant gloves. |
| Skin and body protection | 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 | Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. |

| |
|--|
| 9. PHYSICAL AND CHEMICAL PROPERTIES |
|--|

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Solid |
| Appearance | Granules |
| Color | Gray or Brown |
| Odor | Odorless |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------------|----------------------|--------------------------------|
| pH | No data available | None known |
| Melting point/freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Specific Gravity | No data available | None known |
| Water solubility | Insoluble in water | |
| Solubility in other solvents | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |

Other Information

| | |
|-----------------------------|--------------------------|
| Oxidizing properties | No information available |
| Liquid Density | No information available |
| Bulk density | 35 pounds per cubic foot |

| |
|-------------------------------------|
| 10. STABILITY AND REACTIVITY |
|-------------------------------------|

Reactivity

None under normal processing.

Stability

Stable

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Keep out of reach of children.

Incompatible materials

Incompatible with oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

| | |
|--------------|--|
| Inhalation | May cause irritation of respiratory tract. |
| Eye contact | May cause slight eye irritation. |
| Skin contact | May be harmful in contact with skin. |
| Ingestion | May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

Acute toxicity**Numerical measures of toxicity - Product Information**

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

| | |
|-------------------------|------------|
| ATEmix (oral) | 5646 mg/kg |
| ATEmix (dermal) | 6055 mg/kg |
| ATEmix (inhalation-gas) | 2154 mg/L |

Unknown Toxicity

98 % of the mixture consists of ingredient(s) of unknown toxicity

98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

| | |
|------------------------|----------------------------------|
| LD50 Oral | > 5000 mg/kg Rat-female |
| LD50 Dermal | > 5000 mg/kg Rat-female Rat-male |
| LC50 Inhalation (DUST) | > 2.12 mg/L Rat-male Rat-female |

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

| | |
|-----------------------------------|--|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|---------|-------|------|
| Trade Secret | A2 | Group 1 | Known | X |

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)***A2 - Suspected Human Carcinogen***IARC (International Agency for Research on Cancer)***Group 1 - Carcinogenic to Humans***NTP (National Toxicology Program)***Known - Known Carcinogen***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. |
| Target Organ Effects | Respiratory system, Eyes, lungs, Gastrointestinal tract (GI), Skin, Central nervous system. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------------------|----------------------|------------------------|----------------------------|-------------------|
| Pyrimisulfan 221205-90-9 | EbC50 20µ g/L 72H | LC50 > 127000µ g/L 92H | - | EC50 >122000µ g/L |

Persistence and degradability No information available.**Bioaccumulation** No information available.**Other adverse effects** No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste from residues/unused products** Disposal should be in accordance with applicable regional, national and local laws and regulations.**Contaminated packaging** Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated**TDG** Not regulated**MEX** Not regulated**ICAO (air)** Not regulated**IATA** Not regulated**IMDG** Not regulated

15. REGULATORY INFORMATION

U.S. EPA Label Information**EPA Pesticide Registration Number** 2217-1024**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 REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Environmental Hazards:

Do not apply to water, or 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.

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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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 does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

U.S. State Right-to-Know Regulations**US State Regulations**

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Trade Secret | X | X | X |

16. OTHER INFORMATION

| | | | | |
|-----------------------------------|-------------------|----------------------------------|--------------------|------------------------------------|
| NFPA | Health hazards 1 | Flammability 0 | Instability 0 | Physical and Chemical Properties - |
| HMIS | Health hazards 1* | Flammability 0 | Physical hazards 0 | Personal protection X |
| <i>Chronic Hazard Star Legend</i> | | <i>* = Chronic Health Hazard</i> | | |

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