Material Safety Data Sheet

Product Name: KATANA Turf Herbicide

MSDS No.: 551-6 Version No.: 002 EPA Registration No.: 71512-12-2217

1. Basic Information:

Manufacturer: PBI/Gordon Corporation
Address: 1217 West 12th Street
City, State Zip: Kansas City, MO 64101-1407

Information Contact: Environmental, Health, & Safety Dept.

Information Telephone Number: (816)421-4070

Emergency Contact: Chemtrec

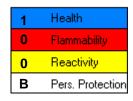
Emergency Telephone Number: (800)424-9300

Last Update: 4/12/2012

Chemical State: Liquid Gas X Solid

Chemical Type: Pure X Mixtur





2. Ingredients:

| Trade Secret | (ND = Not Disclosed) | E | HS | | IARC I | | SARA 313 | OSHA | ACGIH | Other |
|--------------|----------------------|---------|----|-----|-----------|-------|-------------|------|-------|--------|
| CAS No. | Chemical Name | % Range | | NTP | | SUB Z | | PEL | TLV | Limits |
| 104040780 | Flazasulfuron | 25% | N | N | N | N | N | NI | NI | NI |

3. Hazardous Identification:

Hazard Catagory:

X Acute Chronic Fire Pressure Reactive

Hazardous Identification Information:

Brown Granule

EYE Irritant

4. First Aid Measures:

Route(s) of Entry:

Contact, inhalation, ingestion.

Health Hazards (Acute and Chronic):

Potential Acute Health Effects:

Eye Contact: Slightly hazardous in case of eye contact. (irritant)

Ingestion: Low oral toxicity.

Inhalation: Unlikely to cause harmful effects under normal conditions of

handling and use.

Skin Contact: Not a skin irritant. Weak dermal sensitizer. Skin Absorption: Not readily absorbed through intact skin.

Signs and Symptoms:

NI

Medical Conditions Generally Aggravated by Exposure:

NI

Emergency First Aid Procedure:

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 poison control center or doctor for treatment advice.

Skin Contact: 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.

First Aid Measures (Continued)

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Ingestion: 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 the poison control center or doctor. Do not give anythin by mouth to an unconscious person.

Other Health Warnings:

NI

5. Fire Fighting Measures:

Flash Point: NI F.P. Method:

Lower Explosive Limit: NI
Upper Explosive Limit: NI

Fire Extinguishing Media:

Small Fire: Foam, CO2, or dry chemical.

Large Fire: Polar resistant foam or water fog. Avoid use of water jet.

Special Fire Fighting Procedures:

None.

Unusual Fire and Explosion:

Runoff from fire control may pollute surface water; call local authorities if pollution occurs.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Spill or Release: Contain spill. Wear long sleeved shirts, trousers, rubber gloves and boots, goggles and protective mask. If on impervious surface, collect the product with a shovel and place in an adequately identified drum or other vessel. Remove to the area for chemical disposal. Wash the place with plenty of water, avoiding run-off to bodies of water. If on soil, collect the material according to the above description and also contaminated layer of soil. If in bodies of water, immediately discontiue human and animal consumption and contact local competent authorities.

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7. Handling and Storage:

Precautions to be Taken:

Precautions: Avoid contact with skin and eyes. When using do not eat, drink or smoke. When opening the container, avoid spills.

Storage: Store in original container that is tightly closed. Store in a shaded, dry place that is away from food, fertilizer, other pesticides and animal feed. Keep locked up and out of reach of children

Other Precautions:

Ν

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit

Personal Protective Equipment:

Personal Protection: Wear goggles or face guard, dust mask and gloves.

Other Clothing and Equipment: Protective clothing consisting of a long sleeved shirt, long pants and boots should be worn when handling this product. The clothing should be changed at least daily. Persons routinely exposed to this product should shower after completing work each day. Contaminated clothing should be removed and washed thoroughly before re-use. Wash separately from other clothing.

Exposure Limits Not established.

Worker Protection Standard Does not apply.

9. Physical and Chemical Properties:

Boiling Point: NI Melting Point: NI

Evaporation Rate (Butyl Acetate = 1): NI

Vapor Pressure (mm Hg.): NI Vapor Density (Air = 1): NI

Specific Gravity (H20 = 1): 0.79000

Solubility in Water: 2100 ppm @ pH7 for technical

Appearance and Odor: Brown Granules; Cinnamon-lke odor.

Other Information:

pH: 5.0 - 6.0

Density: 49.3 pounds/cubic foot Melting Point for Technical: 302°F

10. Stability and Reactivity:

Stability:

Stable.

Incompatibility (Materials to Avoid):

None known.

Decomposition/By-Products:

May decompose under fire conditions emitting toxic and irritating vapors.

Hazardous Polymerization:

Will not occur.

11. Toxicological Information:

Toxicity to Animals:

--Acute oral toxicity (LDSO): 4694 mg/kg [Rat-male]

Toxicological Information (Continued)

- --Acute oral toxicity (LDSO): 4908 mg/kg [Rat-female]
- --Acute dermal toxicity (LDSO): >2000 mg/kg [Rat]
- --Acute inhalation toxicity (LCSO): 6.17 mg/L, 4 hour(s) [Rat]
- --Primary eye irritation: Eye irritant. Non-corrosive. No corneal or iridal effects
- -- Primary dermal irritation: 0.0 index. Nonirritant.

Long term studies demonstrate that flazasulfuron is not an animal carcinogen. Mutagenicity studies demonstrate that flazasulfuron is not genotoxic.

12. Ecological Information:

Environmental Hazards: Degrades in soil by both microbial and chemical degradation. Microbial degradation is affected by soil temperature and chemical degradation is affected by soil pH. Can be very phytotoxic to non-target plants. Do not apply under conditions that would favor off-site movement (drift) of spray

13. Disposal Considerations:

Waste Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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 Disposal: After all product has been removed from the packaging, triple rinse the container and clean the outer surface! Add the washings to the spray tank. Dispose ofthe cleaned container in a sanitary landfill. The landfill sitl must be away from houses, plants, any water resource, or human and animal habitats. The site must not be subjected to flooding.

14. Transport Information:

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: PESTICIDES, NOI / NMFC 155050-6

In our current available sizes, this product does not qualify as a Hazardous Material.

15. Regulatory Information:

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None SECTION 311/312 HAZARD CATEGORIES: Immediate Health azard

SECTION 313 TOXIC CHEMICALS: None

RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived

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Regulatory Information (Continued)

from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

16. Other Information:

REASON FOR ISSUE: To revise Section 14 Transportation Information.

NOTE: NI means not indicated.

The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.

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