

General Phone: 1-800-258-3033 Emergency Phone: 517-636-4400 DowElanco • Indianapolis, IN 46268

Effective Date: 03/24/97 Product Code: 29819 MSDS: 004019

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: SNAPSHOT* 2.5 TG HERBICIDE

COMPANY IDENTIFICATION:

DowElanco P.O. Box 681428 9330 Zionsville Road Indianapolis, IN 46268-1189 Customer Information Center

800-255-3726

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Isoxaben: N-(3-(1-Ethyl-1-methylpropyl)-5- isoxazolyl)-2,6-dimethoxy-benzaminde CAS # 082558-50-7 0.5% **Trifluralin:** alpha,alpha,alpha-trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine CAS # 001582-09-8 2.0% **Other Proprietary Ingredients, total:** 97.5%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR) 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

3. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Hazardous Chemical. Yellow free-flowing granule with a mild aromatic odor. Will emit toxic vapors if involved in fire. May cause eye irritation with corneal injury. Prolonged or repeated exposure may cause skin irritation. LD $_{50}$ for skin absorption in rabbits is >5000 mg/kg. Oral LD $_{50}$ for rats is >2500 mg/kg. Inhalation LC $_{50}$ if >4.6 mg/L for male rats and 0.5-4.6 mg/L for female rats for 4 hours. Excessive exposure may cause upper respiratory tract irritation. Toxic to fish and aquatic organisms.

EMERGENCY PHONE NUMBER: (U.S.) 517-636-4400

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation with corneal injury. **SKIN:** Prolonged exposure may cause slight skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Did not cause allergic skin reactions when tested in guinea pigs. The LD $_{50}$ for skin absorption in rabbits is >5000 mg/kg.

INGESTION: The single dose oral toxicity is low. The oral LD_{50} for rats is >2500 mg/kg. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract. The LC $_{50}$ is >4.6 mg/L for male rats and between 0.5 and 4.6 mg/L for female rats for four hours.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:

Contains components which, in animals, have been shown to cause liver and/or kidney effects. Repeated excessive exposure to crystalline silica, may affect lung function and cause silicosis, a progressive and disabling disease of the lungs.

CANCER INFORMATION: This mixture contains a component(s) which are listed as potential carcinogens for hazard communication purposes under OSHA Standard 29 CFR 1910.1200. Components listed by IARC and NTP: crystalline silica. A low incidence of urinary tract tumors were seen with trifluralin in one strain of rat in 1 of 5 2-year studies conducted in rats, and trifluralin is not anticipated to be a carcinogenic risk in man. An increase in non-malignant liver tumors was seen with isoxaben in one of two species tested.

TERATOLOGY (BIRTH DEFECTS): Trifluralin did not cause birth defects in animal tests; other fetal effects occurred only at doses toxic to the mother.

REPRODUCTIVE EFFECTS: Isoxaben has been shown to interfere with reproduction in animal studies.

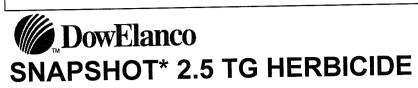
4. FIRST AID:

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel. **SKIN:** Wash off in flowing water or shower. Seek medical attention if irritation develops.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.



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FIRE FIGHTING MEASURES:

FLASH POINT: Not applicable METHOD USED: Not applicable

FLAMMABLE LIMITS

LFL: Not applicable UFL: Not applicable

AUTO-IGNITION TEMPERATURE: Does not ignite up to

1000°F, 537°C

EXTINGUISHING MEDIA: Use water fog, CO2 or dry

chemicals.

FIRE AND EXPLOSION HAZARDS: Will emit toxic vapors

as it burns.

FIRE-FIGHTING EQUIPMENT: Wear full protective clothing and use positive-pressure, self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES: (See Section 15 for Regulatory Information)

ACTION TO TAKE FOR SPILLS: Contain and sweep up material of small spills and dispose as waste. Large spills report to CHEMTREC and DowElanco for assistance. Prevent runoff.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND

STORAGE: Keep out of reach of children. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

These precautions are suggested for conditions with a high potential for exposure. If handling procedures are such that there is only a low potential for exposure, less protection may be needed. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINE(S): Crystalline silica: ACGIH TLV and OSHA PEL are 0.1 mg/m³ (respirable) for quartz, tripoli, and fused silica; 0.05 mg/m³ (respirable) for cristobalite and tridymite. PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure quidelines.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

SKIN PROTECTION: Use gloves impervious to this material when prolonged or frequently repeated contact could occur.

EYE PROTECTION: Use chemical goggles.

PHYSICAL AND CHEMICAL PROPERTIES:

BOILING POINT: Not applicable VAPOR PRESSURE: Not applicable VAPOR DENSITY: Not applicable SOLUBILITY IN WATER: Not applicable SPECIFIC GRAVITY: Not applicable BULK DENSITY: 39-42 lbs/cu.ft.

APPEARANCE: Yellow free flowing granule

ODOR: Mild aromatic odor pH: (aqueous 50/50) 7.0 to 8.0

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) None known INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides and other toxic vapors may be formed if product is involved in fire.

HAZARDOUS POLYMERIZATION: Does not occur.

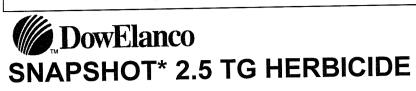
11. TOXICOLOGICAL INFORMATION:

For detailed toxicological data, write the address shown in Section 1 or call the general phone number.

MUTAGENICITY: Animal mutagenicity studies were negative. For crystalline silica, in-vitro mutagenicity studies were negative in some cases and positive in other cases.

12. ECOLOGICAL INFORMATION:

For detailed ecological data, write the address shown in Section 1 or call the general phone number.



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ENVIRONMENTAL DATA: This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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.

14. TRANSPORT INFORMATION:

For DOT regulatory information, if required, consult transportation regulations, product shipping papers, or consult your DowElanco representative.

15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. REGULATIONS

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME CAS NUMBER CONCENTRATION
TRIFLURALIN {BENZENEAMINE, 2,6-DINITRO-N
001582-09-8 2%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

<u>CHEMICAL NAME</u> <u>CAS NUMBER</u> <u>LIST</u> TRIFLURALIN {BENZENEAMINE, 2,6-DINITRO-N,N-DI 001582-09-8 NJ2 PA3 NJ3 PA1

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health 2 Flammability 1 Reactivity 0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases: Category:

Chemical Name
TrifluralinCAS#
001582-09-8RQ
10% in Product
2%



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16. OTHER INFORMATION:

MSDS STATUS: Revised to 16 Section MSDS. Revised all sections for consistency.

The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult DowElanco For Further Information.