

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

Effective Date: 21-Apr-06
Product Code: 72846
MSDS: 006597

HORNET* WDG HERBICIDE

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Hornet* WDG Herbicide

COMPANY IDENTIFICATION:

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1189

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Tan to brown granule. May cause severe eye irritation with corneal injury.

EMERGENCY PHONE NUMBER: 800-992-5994

3. COMPOSITION/INFORMATION ON INGREDIENTS:

Clopyralid Potassium Salt	CAS# 058509-83-4	60.0%
Flumetsulam	CAS# 098967-40-9	18.5%
Balance		21.5%

4. FIRST AID:

EYES: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes and then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: No emergency medical treatment necessary.

INHALATION: Move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES:

FLASH POINT: Not applicable - granular material

FLAMMABLE LIMITS: LFL: Not applicable
UFL: Not applicable

EXTINGUISHING MEDIA: Water fog, foam, CO₂, dry chemical

FIRE AND EXPLOSION HAZARDS: Toxic, irritating gases may be formed under fire conditions. Do not allow product-contaminated water from fire-fighting to enter water supplies.

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

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS: Contain small spills, sweep-up and place in a suitable container for disposal. Report large spills to Dow AgroSciences at 800-992-5994.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Do not get in eyes or on clothing. Avoid skin contact. Avoid breathing vapors or spray mist. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Store in the original container in a dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINE(S):

3,6-Dichloropicolinic acid (clopyralid): Dow AgroSciences Industrial Hygiene Guide is 10 mg/M³.

Flumetsulam: Dow AgroSciences Industrial Hygiene Guide is 3 mg/M³.

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

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge.

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SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

EYE PROTECTION: Use chemical goggles.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

BOILING POINT: Not applicable
VAPOR PRESSURE: Not determined
VAPOR DENSITY: Not determined
SOLUBILITY IN WATER: Water dispersible
SPECIFIC GRAVITY: Not applicable
APPEARANCE: Tan to brown granules
MELTING POINT: 149-151 °C, 300-304 °F (clopyralid)
ODOR: No appreciable odor

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) Stable at normal handling and storage conditions.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Clopyralid can react violently with aluminum above 110 °C, 230 °F when water is present. Avoid contact with aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic, irritating gases may be formed under fire conditions, including nitrogen oxides and hydrogen chloride.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION:

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 severe eye irritation with corneal injury.

SKIN: Prolonged exposure not likely to cause significant skin irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ for skin absorption in rabbits is >5000 mg/kg. Did not cause allergic reactions when tested in guinea pigs.

INGESTION: Very low toxicity if swallowed Harmful effects not anticipated from swallowing small amounts. The oral LD₅₀ for rats is >5000 mg/kg.

INHALATION: Prolonged exposure is not expected to cause adverse effects. The aerosol LC₅₀ for rats is >5.21 mg/L for 4 hours.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: For the active ingredients, in animals, effects have been reported on the following organs: kidney and liver. Observations in animals include lethargy.

CANCER INFORMATION: The active ingredients did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Flumetsulam did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

REPRODUCTIVE EFFECTS: For the active ingredients, in animal studies, have been shown not to interfere with reproduction.

MUTAGENICITY: For the active ingredients, in-vitro and animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION:

Do not apply directly to water, 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 washwaters.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities.

This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

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If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

14. TRANSPORT INFORMATION:

For DOT regulatory information, if required, consult transportation regulations, product-shipping papers, or contact your Dow AgroSciences representative.

Health	2
Flammability	1
Reactivity	1

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.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

16. OTHER INFORMATION:

MSDS STATUS: Revised Sections: 2, 3, 4, 8, 11, 13
Reference: DR-0362-3787
Replaces MSDS Dated: 9/12/00
Document Code: D03-099-004
Replaces Document Code: D03-099-003

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

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.

OSHA HAZARD COMMUNICATION STANDARD: This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult Dow AgroSciences for Further Information.