

MATERIAL SAFETY DATA SHEET



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

Effective Date: 10-May-06
Product Code: 10777

M-PEDE* INSECTICIDE/FUNGICIDE (GF-1212)

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: M-Pede* Insecticide/Fungicide (GF-1212)

COMPANY IDENTIFICATION:

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

NOTE TO PHYSICIAN: Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Yellow liquid with a musty odor.
Health/Environmental Hazards: May cause eye irritation and corneal injury. May cause skin irritation.
EMERGENCY PHONE NUMBER: 800-992-5994

5. FIRE FIGHTING MEASURES:

FLASH POINT: 160°C

FLAMMABLE LIMITS

LFL: Not determined
UFL: Not determined

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Component	CAS Number	W/W%
Potassium Salts of Fatty Acids Balance, Total, including	067701-09-1	49.0%
Propylene Glycol	000057-55-6	51.0%
Potassium Hydroxide	001310-58-3	

EXTINGUISHING MEDIA: Foam, CO₂, or Dry chemical

FIRE AND EXPLOSION HAZARDS: Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.

4. FIRST AID:

EYE: Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice.

SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center for doctor for treatment advice. Never give anything by mouth to an unconscious person.

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. Never give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration: if by mouth to mouth use rescuer protection (pocket mask, etc.). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.

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

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS: Absorb small spills with materials such as sand, sawdust, Zorbball, or dirt. Wash exposed body areas thoroughly after handling. Report large spills to Dow AgroSciences at 800-992-5994.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors and spray mist. Handle concentrate in ventilated area. Wash thoroughly with soap and water after handling and before eating, chewing gum, using tobacco, using the toilet or smoking. Keep away from food, feedstuffs, and water supplies. Store in original container in a well-ventilated area.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

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

EXPOSURE GUIDELINES:

Propylene Glycol: AIHA WEEL is 50 ppm total, 10 mg/M³ aerosol only.

Potassium Hydroxide: ACGIH TLV is 2 mg/M³.

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

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

EYE/FACE PROTECTION: Use chemical goggles.

SKIN PROTECTION: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

HAND PROTECTION: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber, Chlorinated polyethylene, Polyethylene, Ethyl vinyl alcohol laminate (EVAL), Styrene/butadiene rubber. Examples of acceptable glove barrier materials include: Natural rubber (Latex), Neoprene, Nitrile/butadiene rubber (Nitrile or NBR), Polyvinyl chloride (PVC or vinyl), Viton. Avoid gloves made of: Polyvinyl alcohol (PVA). **NOTICE:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

RESPIRATORY PROTECTION: Use an approved respirator. Selection of air purifying or positive pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency, use an approved positive-pressure self-contained breathing apparatus. The following should be effective types of air-purifying respirators: organic vapor cartridge with a particulate pre-filter.

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

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Yellow Liquid

ODOR: Musty

DENSITY: 1.02 g/mL @20°C

pH: 10.2

BOILING POINT: No test data available.

SOLUBILITY IN WATER: No test data available.

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) Stable under normal storage conditions.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) None Known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION:

EYE: May cause moderate eye irritation. May cause corneal injury. Mist may cause eye irritation. Effects may be delayed.

SKIN: Brief contact may cause skin irritation with local redness. Prolonged contact may cause severe skin irritation with local redness and discomfort. Effects may be delayed. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The dermal LD₅₀ has not been determined.

INGESTION: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in irritation of the mouth, throat, and gastrointestinal tract. Single dose oral LD₅₀ has not been determined.

INHALATION: Mist may cause irritation of upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema (fluid in the lungs). The aerosol LC₅₀ has not been determined.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

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CANCER INFORMATION: Propylene glycol did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Propylene glycol did not cause birth defects or any other fetal effects in laboratory animals.

REPRODUCTIVE EFFECTS: For propylene glycol, in animal studies, did not interfere with production. In animal studies, did not interfere with fertility.

MUTAGENICITY: For propylene glycol, in-vitro and animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL FATE:

MOVEMENT & PARTITIONING:

No relevant information found

DEGRADATION & PERSISTENCE:

No relevant information found.

ECOTOXICOLOGY:

No relevant information found.

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.

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

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION:

For all shipments of less than 11,235 pounds by all modes of transportation:

This material is not regulated for transport.

For shipments of at least 11,235 pounds by road, rail or vessel:

ENVIRONMENTALLY HAZARDOUS SUBSTANCES,
LIQUID N.O.S./(CONTAINS POTASSIUM
HYDROXIDE)/9/UN3082/PG III/RQ (POTASSIUM
HYDROXIDE)

Dow AgroSciences does not recommend shipment by air for shipments greater than 11,235 lbs.

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: 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 Section 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.

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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.

CHEMICAL NAME	CAS NUMBER	LIST
Propylene Glycol	000057-55-6	PA1
Potassium Hydroxide.....	001310-58-3	NJ3, PA1

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

PA1=Pennsylvania Hazardous Substance (present at > or = 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.

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:

Chemical Name	CAS Number	RQ	% in Product
Potassium Hydroxide	001310-58-3	1000 lb.	9%

16. OTHER INFORMATION:

MSDS STATUS: New (replaces Mycogen MSDS)
Reference: TIME*21098
Replaces MSDS Dated: 30-Jan-06
Document code D03-304-003
Replaces document code D03-304-002

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