

MATERIAL SAFETY DATA SHEET

Diuron IVM

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1. IDENTIFICATION

Product name: **Diuron IVM**
Chemical name of active ingredient(s): Diuron (3-(3,4-dichlorophenyl)-1,1-dimethylurea)
Manufacturer/Registrant: Makhteshim-Agan of North America
551 Fifth Avenue, Suite 1100
New York, NY 10176
Phone: 212-661-9800
For fire, spill, and/or leak emergencies, contact Phone: 1-800-535-5053
Infotrac:
For medical emergencies and health and safety inquiries, contact Prosar: Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	ACGIH (TLV)	OSHA (TWA)	PERCENT
Diuron	330-54-1	10 mg/m ³	NE	80%

3. HAZARDS IDENTIFICATIONS

SIGNS OF POISONING: Drowsiness, irritability, diarrhea

PRIMARY ROUTES OF ENTRY: Ingestion, skin/eye contact

SYMPTOMS OF SINGLE EXPOSURE:

Ingestion: Drowsiness, hyperreflexia, irritability, diarrhea, hyperthermia and weight loss

Skin Absorption: None known

Inhalation: Drowsiness, irritability, diarrhea, respiratory tract irritation

Eyes: May cause eye irritation

EFFECTS OF REPEATED OVEREXPOSURE: Prolonged or repeated overexposure may cause skin and/or eye irritation

OTHER EFFECTS OF OVEREXPOSURE: Extreme overexposure may cause glycosuria, proteinuria, and aciduria. Long term exposure may also cause enlarging of the liver and/or spleen

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory conditions.

4. FIRST AID

IF ON SKIN OR CLOTHING:

- 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.

IF IN EYES:

- 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.

IF SWALLOWED:

- 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 a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

5. FIRE FIGHTING MEASURES

FLASHPOINT: Non-combustible

FLAMMABLE LIMITS (% in air): Not determined

AUTOIGNITION TEMPERATURE: Not determined

FLAMMABILITY: Not Applicable

UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS: Noxious fumes may be emitted under fire conditions

EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water stream may spread flames

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SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Dike the area using absorbent materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1-2 inches. Prevent the spilled product or washing from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry, secure area away from sources of heat

7. HANDLING AND STORAGE

STORAGE: Store in a dry location away from children, animals, foods, feeds, seeds, fertilizers, or other agricultural chemicals. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. In the event of spillage, scrape up spillage. If spillage is not suitable for use, dispose of in accordance with information given under DISPOSAL. Repackage and relabel useable product in a sound container. In case of fire or other emergency, report at once by toll free telephone to Infotrac, 1-800-535-5053.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, AND PACKAGING OF THE PRODUCT.

FOR COMMERCIAL APPLICATIONS AND ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

Eye Contact: To avoid eye contact, wear chemical safety glasses with side shields or chemical goggles.

Skin contact: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering. Discard heavily contaminated articles, which cannot be washed.

Inhalation: To avoid breathing vapors or spray mist, wear a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a supplied-air respirator.

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment
- Clean up of leaks and spills
- Any other activity that may result in hazardous exposures
- Refer to product label for PPE required for labeled use

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure contained breathing apparatus where emergency conditions or where exposure limits are exceeded

VENTILATION: Local exhaust

PROTECTIVE CLOTHING: Chemical resistant gloves, coveralls, apron and foot coverings

EYE PROTECTION: Safety goggles

USER SAFETY RECOMMENDATIONS: Safety showers and eye wash should be easily accessible

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white granules

ODOR: Slightly sweet

FORMULA: C₉H₁₀Cl₂N₂O

MOLECULAR WEIGHT (DIURON): 233.10

MELTING POINT (DIURON): 158-159°C

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BOILING POINT: Not determined

SPECIFIC GRAVITY/DENSITY (BULK): 0.62 g/mL (5.17 lb/gal)

pH: 7.0-9.0

SOLUBILITY IN H₂O (DIURON): 42 ppm AT 25°C

VAPOR PRESSURE (DIURON): 0.01 mPa at 25°C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Excessive heat.

MATERIALS TO AVOID: None known

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and carbon, hydrogen chlorides

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute oral LD 50 (Rat): 1879 mg/kg

Acute Dermal LD 50 (Rabbit): >5000 mg/kg

Acute Inhalation: > 2.03 mg/L

Eye Irritation (rabbit): Mild irritant

Dermal Irritation (rabbit): Non irritating

Dermal Sensitization: Not a sensitizer

MUTAGENICITY, CARCINOGENICITY, TERATOGENICITY: Not listed as a carcinogen by NRC, IARC, or OSHA

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated. Cover or incorporate spills.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

CONTAINER DISPOSAL: Dispose of in an approved manner according to federal, state and local regulations

14. TRANSPORT INFORMATION

DOT/IMO/IATA CLASSIFICATION: Not Regulated (<125 lbs./Package)

B/L FREIGHT CLASSIFICATION: Compounds, Tree or Weed Killing (Herbicides), NOI, other than poison

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302-304 (40 CFR 350): Not Listed

Extremely Hazardous Substance (EHS): Not listed

Section 312, Reporting (40 CFR 370):

SECTION 311/312: Acute Health Hazard
Chronic Health Hazard

SECTION 313 (chemicals): Diuron

Threshold Planning Quantity: 10,000 lbs.

Reportable Quantity (RQ): Diuron-100 lbs.

RCRA Classification: Not listed

16. OTHER INFORMATION

NFPA HAZARD RATINGS	NFPA	HMIS		
HEALTH:	2	2	0	LEAST
FLAMMABILITY:	0	0	1	SLIGHT
REACTIVITY:	0	0	2	MODERATE
			3	HIGH
			4	SEVERE

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