

MATERIAL SAFETY DATA SHEET

Diurex 80 WDG

Page 1 of 4

1. IDENTIFICATION

Product name: **Diurex 80 WDG (PCP 28107)**
Chemical name of active ingredient(s): Diuron: (3-(3,4-dichlorophenyl)-1,1-dimethylurea)
Manufacturer/Registrant: Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609
Phone: 919-256-9300
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

COMMON NAME	CAS NO.	%	OSHA PEL	ACIGH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Diuron	330-54-1	80	NA	10 mg/m ³	NA	NA
Talc	14807-96-6	11.3	NA	2.0 mg/m ³	NA	IARC - 3*

*IARC - Rating 3: The agent is unclassifiable as to carcinogenicity in humans.

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Beige pellets

Odor: None

EMERGENCY OVERVIEW: WARNING - EYE IRRITANT CAUTION. KEEP OUT OF REACH OF CHILDREN. Causes eye irritation. DO NOT get in eyes. May irritate nose, throat and skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Harmful if swallowed. Do not reuse containers.

PRIMARY ROUTES OF ENTRY: Ingestion, skin and eye contact

SYMPTOMS OF ACUTE 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 CHRONIC OVEREXPOSURE: Prolonged or repeated overexposure may cause skin and/or eye irritation. 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.

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

4. FIRST AID

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IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

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 centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: 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 centre or doctor for further treatment advice.

Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASHPOINT: Not applicable

FLAMMABLE LIMITS (% in air): Not determined

AUTOIGNITION TEMPERATURE: Not determined

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.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self-contained breathing apparatus and full turnout gear. Prevent runoff of firewater. 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.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid contact with skin and eyes. 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. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original container only, away from other pesticides, fertilizer, food, or feed.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures. Avoid excessive heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

EYE PROTECTION: Protective eyewear (e.g., goggles or full-face shield).

SKIN PROTECTION: Long-sleeved shirt and long pants, shoes plus socks. Use apron and coveralls when necessary.

HAND PROTECTION: Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

RESPIRATOR REQUIREMENTS: Use a dust/mist respirator.

ADDITIONAL PROTECTIVE MEASURES: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

MATERIAL SAFETY DATA SHEET

Diurex 80 WDG

Page 3 of 4

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Beige pellets

ODOR: None

FLASH POINT: Not applicable

pH: 8.56

BULK DENSITY: 0.619 g/mL

FORMULA: C₉H₁₀Cl₂N₂O

MOLECULAR WEIGHT (DIURON): 233.10

MELTING POINT (DIURON): 158-159°C

BOILING POINT: Not determined

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

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 LD50 (Rat):	1,879 mg/kg
Acute Dermal LD50 (Rabbit):	>5,000 mg/kg
Acute Inhalation LC50 (Rat):	>2.03 mg/L
Eye Irritation (Rabbit):	Mildly irritating.
Dermal Irritation (Rabbit):	Non-irritating.
Dermal Sensitization:	Not a skin sensitizer

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Toxic to aquatic organisms and terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**. Do not apply directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs or wetlands) and estuarine/marine habitats. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured or low in organic matter such as clay). Avoid application of this product when heavy rain is forecast. The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) and/or where the depth to the water table is shallow.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency.

MATERIAL SAFETY DATA SHEET

Diurex 80 WDG

Page 4 of 4

CONTAINER DISPOSAL: Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Follow provincial instruction for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Package size <125 lbs.: Not regulated

Package size ≥125 lbs.: UN 3077, Environmentally hazardous substances, solid, N.O.S. (Diuron), 9, PG III, RQ

INTERNATIONAL TRANSPORTATION:

IMO (vessel):

Package size <125 lbs.: Not regulated

Package size ≥125 lbs.: UN 3077, Environmentally hazardous substances, solid, N.O.S. (Diuron), 9, PG III, RQ

IATA (air):

Package size <125 lbs.: Not regulated

Package size ≥125 lbs.: UN 3077, Environmentally hazardous substances, solid, N.O.S. (Diuron), 9, PG III, RQ

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

U.S. FEDERAL REGULATIONS:

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)
Chronic health hazard (delayed)

Section 313: Diuron (80%) CAS#: 330-54-1

CA PROPOSITION 65: This product contains a material (diuron) known to the State of California to cause cancer.

CERCLA RQ: Diuron 100 lbs. (125 lbs. of product)

RCRA CLASSIFICATION: 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 from the product should be classified as a hazardous waste.

TSCA STATUS: Not applicable

16. OTHER INFORMATION

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

MSDS DATE: 6-10-09. Supersedes version dated 5-7-06. Changes made to all sections.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.