

MATERIAL SAFETY DATA SHEET

WINFIELD SOLUTIONS, LLC
P.O. Box 64089, St. Paul, MN 55164-0089

PRODUCT NAME(S)

For Emergency Call: 1-877-424-7452 or
Chem Trec: 800-424-9300

DIURON 4L

Effective Date: 09/14/07

I. IDENTIFICATION**CHEMICAL NAME OF PRIMARY COMPONENT(S):** 3-(3,4-dichlorophenyl)-1,1-dimethylurea**FORMULA:** C₉H₁₀Cl₂N₂O**MOLECULAR WEIGHT:** 233.10**SYNONYMS:** Diuron**CAS # & NAME:** 330-54-1 Diuron**EPA Reg No.** 9779-329**II. INGREDIENTS/SUMMARY OF HAZARDS**

INGREDIENT(S)	CAS NUMBER	OSHA HAZARD (H) NON-HAZARD (NH)	PERCENT
Diuron	330541	H	40%
Ethylene glycol	107211	H	3%
Formulation aids		NH	57%

	NFPA ^{1/}	HMIS ^{2/}
HEALTH	2	2
FIRE	0	0
REACTIVITY	0	0

1/ National Fire Protection Association Rating

2/ Hazardous Materials Identification System

(4 = Extreme/Severe 3 = High/Serious 2 = Moderate 1 = Slight 0 = Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	No
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

III. PHYSICAL DATA

SPECIFIC GRAVITY: 1.175
BOILING POINT: Not determined
FREEZING POINT: Not determined
VAPOR PRESSURE: Negligible
SOLUBILITY IN WATER: Miscible
APPEARANCE: Light tan liquid
ODOR: Odorless

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable
FLAMMABLE LIMITS IN AIR: Not determined
AUTOIGNITION TEMPERATURE: Not determined
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.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious fumes may be emitted under fire conditions.
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.

V. REACTIVITY DATA

STABILITY: Stable, under normal conditions
CONDITIONS TO AVOID: Excessive heat
MATERIALS TO AVOID: Strong acids or strong basis; hydrolysis may occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and carbon, hydrogen chlorides.
HAZARDOUS POLYMERIZATION: Will not occur

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

TOXICOLOGY DATA:
Acute Oral LD₅₀ (rat): 4480 mg/kg
Acute Dermal LD₅₀ (rabbit): > 2020 mg/kg
Acute Inhalation (4 hr rat): 3.58 mg/L
Eye Irritation (rabbit): Mild irritant
Dermal Irritation (rabbit): Mild irritant
Dermal Sensitization: Not a sensitizer

EXPOSURE LIMITS:

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
Diuron	10 mg/m ³	10 mg/m ³

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

SIGNS OF POISONING: Drowsiness, irritability, diarrhea

PRIMARY ROUTES OF ENTRY: Ingestion, skin/eye contact

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing: 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 causes enlargening 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.

EMERGENCY AND FIRST AID PROCEDURES:

Swallowing: Call physician or poison control center. If patient is alert and not convulsing give 1 - 2 glasses of water and induce vomiting by tickling the back of the throat or administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

Skin: Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention if irritation develops and persists.

Inhalation: Remove victim to fresh air. If not breathing, administer artificial respiration. GET MEDICAL ATTENTION.

Eyes: Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN: Treat symptomatically.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike the area using absorbent or 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 washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

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

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

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

VIII. SPECIAL PROTECTION INFORMATION

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.

IX. REGULATORY STATUS

TSCA INVENTORY STATUS:

TRANSPORTATION STATUS:

DOT INFORMATION:

Container Capacity	Proper Shipping Name	Hazard Class	Label	Packing Group
Greater than 25 gallons	RQ, Environmentally hazardous substances, liquid, N.O.S. (contains diuron), UN 3082	9	9	III

SARA TITLE III

Section 302-304 (40 CFR 350):

Extremely Hazardous Substance (EHS): Not listed

Section 312, Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical Reporting Quantity: 10,000 lbs

Section 313, Toxic Chemicals: Diuron, Ethylene glycol

Reportable Quantity (RQ): Diuron 100 lbs, Ethylene glycol 5,000 lbs

RCRA HAZARDOUS WASTE: Not listed

International Right-To-Know Regulations:

X. REFERENCES

- 1) Supplier sponsored studies.

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH,
BUT, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.