

#36047+36049

REPORT NUMBER: 703
MSDS NO: P10379VS
EFFECTIVE DATE: 02/10/95

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

P1 PAGE: 001

VERSION: 006

PRODUCT: UREA COMMERCIAL GRADE

ORDER NO: 388328
PROD NO : 606725

NAR ENTERPRISES
% KCDA
18638 80TH SO.
DOORS 19-24
KENT , WA 98371

VAN WATERS & ROGERS INC. , SUBSIDIARY OF UNIVAR (206)889-3400
6100 CARILLON POINT , KIRKLAND , WA 98033

----- EMERGENCY ASSISTANCE -----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL -- CHEMTREC
(800)424-9300

SECTION I PRODUCT IDENTIFICATION

PRODUCT NAME: UREA COMMERCIAL GRADE

MSDS #: P10379VS

DATE ISSUED: 05/04/94

ISSUED BY: 005222

HEALTH HAZARDS:

Health Hazards: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

PHYSICAL HAZARDS:

Physical Hazards: None Anticipated
Physical Form: Solid
Appearance: White granules
Odor: None

NFPA HAZARD CLASS: Health: 0 (Least)
Flammability: 0 (Least)

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Reactivity: 0 (Least)

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	%	WEIGHT	EXPOSURE GUIDELINE		
			Limits	Agency	Type
Nuisance Dust-Total, If Generated CAS# None		10	10 mg/m3	ACGIH	TWA
			15 mg/m3	OSHA	TWA
			10 mg/m3	MSHA	TWA
			mg/m3	Cal.OSHA	TWA
Nuisance Dust- Respirable, If Generated CAS# None			5mg/m3	OSHA	TWA
			5mg/m3	Cal.OSHA	TWA

OTHER COMPONENTS	%	WEIGHT	EXPOSURE GUIDELINE		
			Limits	Agency	Type
Urea CAS# 57-13-6	97-99		(See: Nuisance Dust-Total, If Generated) (See: Nuisance Dust- Respirable, If Generated)		
Methylenediurea CAS# 13547-17-6	1.5-2.5		Not Established		
Biuret CAS# 108-19-0	0.75-1.25		Not Established		

Note: Most OSHA exposure limits shown above are 1989 PEL's vacated by the U.S. Court of Appeals. These are included as guideline information. Enforceable limits may be less stringent or are Not Established.

SECTION 3 HAZARDS IDENTIFICATION

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: Contact may cause mild skin irritation including redness and burning. No harmful effects from skin absorption have been reported.

Inhalation (Breathing): No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

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Ingestion (Swallowing): No harmful effects reported.

Signs and Symptoms: Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, headaches, coughing, nausea, vomiting and transient disorientation.

Cancer: Inadequate data available for this material. See Section 11 for Carcinogenicity information on individual components.

Target Organs: No data available.

Developmental: Inadequate data available for this material. See Section 11 for developmental toxicity information on individual components.

Pre-Existing medical conditions: None Known

SECTION 4 FIRST AID MEASURES

Eye: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

Skin: Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.

Inhalation (Breathing): If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion (Swallowing): No first aid is normally required; however, if swallowed and symptoms develop, seek medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:
Flash Point: No Data
OSHA Flammability Class: Not applicable
LEL/UEL: No Data
Autoignition Temperature: No Data

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Burn Rate (solids only): No Data

Unusual Fire & Explosion Hazards: No unusual fire or explosion hazards are expected.

Extinguishing Media: Use that which is appropriate for surrounding fire.

Fire Fighting Instructions: Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage (29CFR 1910.156). In addition, wear other appropriate protective equipment as conditions warrant (See Section 8). Isolate damage area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from danger area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors. Cool equipment exposed to fire with water, if it can be done with minimal risk.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Stay upwind and away from spill/release. Isolate danger area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Notify appropriate federal, state, and local agencies. Minimize dust generation. Sweep up and package appropriately for disposal.

SECTION 7 HANDLING AND STORAGE

Handling: Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Section 2 and 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

Storage: Keep container(s) tightly closed. Use the store this material cool, dry, well-ventilated areas. Store only in approved containers. Keep away from any incompatible material (See Section 10). Protect contain(s) against physical damage.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Engineering controls: If current ventilation practices are not adequate to minimize exposure, additional ventilation or exhaust systems may be required.

Personal Protective Equipment (PPE):

Respiratory: Respiratory protection may be necessary to minimize exposure. Depending on the nature and concentration of the airborne material, use a respirator or gas mask with appropriate filters, cartridges, and canisters (NIOSH approved, if available) or supplied air equipment.

Skin: The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation, and absorption.

Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

Other Protective Equipment: It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20 C (68 F) and 760 mm Hg (1 atm).

Flash Point: No Data
Flammable/ Explosive Limit s(%): No Data
Autoignition Temperature: No Data
Burn Rate (solids only): No Data
Appearance: White granules
Physical State: Solid
Odor: None
pH: No Data
Vapor Pressure (mm Hg): No Data
Vapor Density (air=1): No Data
Boiling Point: No Data
Melting Point: 271F
Solubility in Water: 100%
Specific Gravity: >1
Bulk Density: 49.5 lbs/ft³

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of storage and handling.

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Conditions To Avoid: None Known

Incompatible Materials: Nitric Acid or Hypochlorites react with urea to form unstable and potentially explosive compounds. Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: If involved in a fire, oxides of carbon and nitrogen may be generated. Exposure to heat may generate ammonia and ammonium cyanate fumes.

Hazardous Polymerization: Will not occur.

SECTION 11 TOXICOLOGY INFORMATION

No definitive information available on Carcinogenicity, mutagenicity, target organs or developmental toxicity.

SECTION 12 DISPOSAL CONSIDERATIONS

This material, as produced, is not an EPA "listed" hazardous waste, but has not been evaluated using the Toxicity

Characteristic Leaching Procedure. The EPA hazardous waste classification has not been determined.

Empty containers must be handled with care due to material residue. Empty drums should be completely drained, properly bunged, and promptly returned to the supplier or shipped to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Any rinsate may be considered RCRA hazardous waste and must be disposed of with care.

State and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

SECTION 13 TRANSPORT INFORMATION

Hazard Class or Division: Not regulated

SECTION 14 REGULATORY INFORMATION

This material contains the following chemicals subject to the

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reporting requirements of SARA 313 and 40 CFR 372:

--None--

WARNING: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

--None Known--

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. For Carcinogenicity information on individual components see Section 11.

NFPA HAZARD CLASS

Health: 0
Flammability: 0
Reactivity: 0

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----- FOR ADDITIONAL INFORMATION -----

CONTACT: MSDS COORDINATOR VAN WATERS & ROGERS INC.
DURING BUSINESS HOURS, PACIFIC TIME (206)889-3400

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