



SOVEREIGN CHEMICAL COMPANY

1225 West Market Street Akron, Ohio 44313

Phone: 330-869-0500, Fax: 330-869-0518

www.sovchem.net

Material Safety Data Sheet

WUF-16 Urea Powder

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Manufacturer: Sovereign Chemical Company 1225 West Market Street Akron, Ohio 44313 Phone: 330-869-0500 Fax: 330-869-0518	Emergency Contact : Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): WUF-16 Urea Powder	MSDS Number: 1007
Chemical Name: urea	Synonyms: Carbamide, Carbonyl diamide
Prepared By: Sovereign Chemical Company	Date of Issue: May 14, 2009 Revision Number: 7 (supersedes May 20, 2005) Change(s): 3 year update

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH (TLV)</u>	<u>OSHA (PEL)</u>
Urea	57-13-6	> 95-97	NE	NE
Proprietary Process Aids		2 - 4	NE	NE

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

White powder with slight ammonia odor. During fire situations, irritating and toxic gases may be emitted. Use appropriate personal protective equipment. Keep from entering storm or sanitary sewers, ground water or soil. The oil in process aids may cause releases to be reportable to local, state, and/or federal authorities. Under normal conditions, the product has a low order of toxicity. Dust may form explosive mixture with air. Prevent dispersion of dust.

HMIS Rating: Health – 1, Flammability – 1, Reactivity – 0, Personal Protection Equipment – E (safety glasses, gloves, dust mask)

This is recommended personal protection equipment, final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

Potential Health Effects:

Eye: May cause irritation.

Skin Contact: May cause irritation.

Ingestion: May cause irritation.

Inhalation: May cause gastrointestinal distress. Slight irritation of nasal passages.

Chronic & Carcinogenicity: May cause dermatitis. Product is not known to be carcinogenic. Pre-existing respiratory and skin conditions may be aggravated by long term exposure to the product.

Skin Absorption: Product is not absorbed through the intact skin.

4. FIRST AID MEASURES

Skin: Wash thoroughly with mild soap and water. Seek medical attention if irritation develops. Remove any contaminated clothing and launder thoroughly before reuse.

Eye: Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention if irritation develops.

Ingestion: Not expected to be an important route of entry into the body. If large amounts of the product are ingested, give 2 glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not Applicable **LEL:** ND **UEL:** ND **Auto Ignition Temperature:** ND

Use water, foam, dry chemical, or carbon dioxide to extinguish fires. Product in or near fires should be cooled with a water spray or fog. A self contained breathing apparatus (SCBA) operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires.

6. ACCIDENTAL RELEASE MEASURES

Pick up with suitable implements and return to original container if reusable. If product is not usable, place in a DOT approved container for disposal. Individuals involved in the cleanup should wear appropriate personal protective equipment. See Section 8. Unnecessary personnel should be kept clear of the area. Keep from entering storm or sanitary sewers, ground water, or soil. Dispose of following all local, state and federal laws. Other information as required.

7. HANDLING AND STORAGE

Storage Conditions: Do not store near or with strong oxidizing agents or at high temperatures. Store in closed containers in a dry environment.

Handling: Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts generated during processing or handling. Product can become slippery when wet. Individuals handling this product should wear personal protective equipment specified in Section 8. Plant environment should include controls and equipment specified in Section 8.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: Dust mask

Eye Protection: Safety glasses with side shields are recommended for all operations.

Protection Gloves: Polymeric gloves are recommended to prevent possible irritation.

Other Protection Items: Polymeric coated apron or other body covering is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: White Powder	Melt Point: 271°F (decomposes)
Vapor Density (Air = 1): Not applicable	Octane/Water Partition Coefficient: -3.00 to -1.54
Vapor Pressure: Not applicable	Evaporation Rate BuOAC = 1: Not applicable
Odor: Slight ammonia odor	Specific Gravity: 1.3
% Volatile by Volume: Not applicable	Boiling Point: Not applicable
% Solubility (H₂O) : Appreciable (>95%)	pH: 7.2 (10 % solution)

10. STABILITY AND REACTIVITY

Stability /Polymerization: Stable under normal conditions. Hazardous polymerization will not occur.

Incompatibility (conditions to avoid): Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Ammonia, cyan uric acid, hydrogen cyanide, beret, carbon monoxide. May produce dense smoke, oxides of carbon and nitrogen, and low molecular weight organic species whose composition and toxicity are not known.

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

LD50 (Rat) = 14,300 mg/kg. Very low order of toxicity.

12. ECOLOGICAL INFORMATION

Detailed studies have not been conducted concerning the environmental fate of the product.

13. DISPOSAL CONSIDERATIONS

Product should be disposed of in an EPA approved landfill in accordance with all local, state, and/or federal regulations. Sweep spilled substance into containers; if appropriate moisten first to prevent dusting. Wash away remainder with plenty of water.

14. TRANSPORTATION INFORMATION

The product is not currently regulated by DOT.

Freight Classification = Rubber Chemical, NOI

15. REGULATORY INFORMATION

OSHA Hazard Communication Classification: Irritant

CERCLA/RCRA: No planning or reportable quantities.

SARA Title III, Section 313, OSHA 1910.119, NTP, IARC, Subpart Z, NFPA, WHMIS, California Proposition 65: Not listed.

Canadian DSL: All ingredients are listed.

TSCA: All Ingredients are listed on the TSCA inventory.

16. OTHER INFORMATION

NE = Not Established

NA = Not Applicable

ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:

Chemical REG-A-DEX, J.J.Keller,

WHMIS Compliance Manual, Carswell,

Transportation of Dangerous Good, J.J.Keller,

Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 2003

NIOSH Pocket Guide to Chemical Hazards,

ACGIH Threshold Limit Values, 1999

HMIS Implementation Manual, 2nd Edition

Toxicity and Safe Handling of Rubber Chemicals, BRMA, 3rd Edition

ChemCheck Handbook, Specialty Technical Publishers,

IARC WEB site

NTP WEB site

IMPORTANT SAFETY NOTICE: The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of this product are not within the control of Sovereign Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors of the information on this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.