

# MATERIAL SAFETY DATA SHEET

Urea

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Urea  
Product Code: U7690  
Material Uses:  
Manufacturer: Science Stuff  
1104 Newport Ave  
Austin, TX 78753  
(512) 837-6020  
Entry Date : 7/2/2013  
Print Date: 7/2/2013  
24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

|               |   |
|---------------|---|
| Health:       | 2 |
| Flammability: | 1 |
| Reactivity:   | 0 |

Hazard Rating:  
Least Slight Moderate High Extreme  
0 1 2 3 4  
NA=Not Applicable NE=Not Established

## SECTION 2 HAZARD IDENTIFICATION

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

## SECTION 3 MIXTURE COMPONENTS

| SARA 313                 | Component | CAS Number   | Percent Comp. | Dimension | Exposure Limits  |
|--------------------------|-----------|--------------|---------------|-----------|------------------|
| <input type="checkbox"/> | Urea      | CAS# 57-13-6 | 100%          | W/W       | None Established |

## SECTION 4 FIRST AID MEASURES

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

## SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire  
Fire / Explosion Hazards: Dust at sufficient concentrations can form explosive mixtures with air.  
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

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Wear Protective equipment. Sweep up, place in a bag and hold for waste disposal.

**SECTION 7 HANDLING AND STORAGE**

Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory Protection: NIOSH approved dust mask  
Ventilation  
Local Exhaust   
Mechanical   
Protective Gloves: Gloves to prevent skin exposure as rubber or vinyl  
Eye Protection: Splash Goggles  
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

|                      |                          |                             |                |
|----------------------|--------------------------|-----------------------------|----------------|
| Melting Point:       | 133° C                   | Percent Volatile by Volume: | 0              |
| Boiling Point:       | Decomposes               | Evaporation Rate            | N/A            |
| Vapor Pressure:      | N/A                      | Evaporation Standard        |                |
| Vapor Density:       | 2.07 (air=1)             | Auto Ignition Temp          | Not applicable |
| Solubility in Water: | Soluble                  | Lower Flamm. Limit in Air   | Not applicable |
| Appearance /Odors:   | White crystals, odorless | Upper Flamm. Limit in Air   | Not applicable |
| Flash Point:         | N/A                      |                             |                |
| Specific Gravity:    | 1.34                     |                             |                |

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability: Stable  
Conditions to Avoid: Moisture, heat  
Materials to Avoid: Strong oxidizing agents,bases, acids.  
Hazardous Decomposition Products: Oxides of carbon and nirtogen, ammonia, Cyanide  
Hazardous polymerization: Will Not Occur  
Conditions to Avoid: None known

**SECTION 11 Toxicological Information**

Routes of Entry: Inhalation. Ingestion.  
Toxicity to Animals: Acute oral toxicity (LD50): 8471 mg/kg [Rat].  
Chronic Effects on Humans:  
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: blood, cardiovascular system. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.  
Special Remarks on Toxicity to Animals: Not available.  
Special Remarks on Chronic Effects on Humans:

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May cause adverse reproductive effects (fetotoxicity) and genetic material (mutagenicity) based on animal studies. Passes through the placental barrier in human and is present in breast milk.  
Special Remarks on other Toxic Effects on Humans:  
Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation.  
Inhalation: Causes irritation of the respiratory tract, nose, and throat, coughing and sneezing. May also affect blood, metabolism and urinary system. Ingestion: Causes digestive (gastrointestinal) tract irritation with nausea, vomiting, and diarrhea. May affect behavior (altered sleep time, change in motor activity), cardiovascular system (heart rate), and the brain. May also affect the blood and may cause tumorigenic effects. Chronic Potential Health Effects: Prolonged exposure may cause adverse reproductive effects. Laboratory experiments on animals have resulted in mutagenic effects. Prolonged exposure or exposure at high concentrations may cause eye damage.

## SECTION 12 Ecological Information

Ecotoxicity: Not available.  
BOD5 and COD: Not available.  
Products of Biodegradation:  
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.  
Special Remarks on the Products of Biodegradation: Not available.

## SECTION 13 Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## SECTION 14 Transport Information

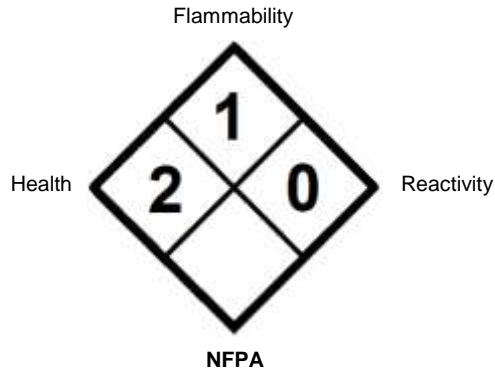
DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

## SECTION 15 Regulatory Information

Federal and State Regulations:  
Minnesota: Urea TSCA 8(b) inventory: Urea  
Other Regulations:  
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.  
Other Classifications:  
WHMIS (Canada): Not controlled under WHMIS (Canada).  
DSCG (EEC):  
R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. S24/25- Avoid contact with skin and eyes.

## SECTION 16 Additional Information



**Revisions**

|     |                      |
|-----|----------------------|
| 0.1 | Revised to 16 sec LS |
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