



Big Bend Industrial Sales, Inc.  
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[www.bigbendagri.com](http://www.bigbendagri.com)  
800.321.7709

## SAFETY DATA SHEET

Version 1.0  
Revision Date 12-31-2021  
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### 1. Identification

Product Name: Urea Solution 40%, 45% and 50%

Synonyms: None

Product Use: Fertilizer. Pollution control. Manufacturing.

Manufacturer/Supplier: Big Bend Industrial Sales

Address: 328 1<sup>st</sup> Ave NE Cairo, GA

Phone: 800-321-7709

Emergency contact: ChemTel 800.255.3924

### 2. Hazard Identification

Signal Word: No signal word

Skin Irritation: Prolonged or repeated contact may irritate slightly.

Eye Irritation: Contact with liquid may irritate slightly.

Hazard Categories: None

Hazard Statement: May be harmful if swallowed  
May be harmful in contact with skin  
Causes eye irritation

Causes mild skin irritation May be harmful if inhaled

### 3. Composition / Information on Ingredients

Component

Blend of water and urea

Ingredient Name	%	CAS number
Water	50	7732-18-5
Urea	49-51%	57-13-6
Biuret	<.4%	

### 4. First Aid Measures

#### Eye:

No known significant effects or critical hazards. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

#### Skin:

Wash skin thoroughly with soap and water. Get medical attention if irritation develops.

#### Inhalation:

No known significant effects or critical hazards. Get medical attention if symptoms occur. If any ill effects are felt, proceed as follows. Call a POISON CENTER or doctor.

#### Ingestion:

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects:

**Eye contact :** No known significant effects or critical hazards.

#### Inhalation :

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Ingestion :** No known significant effects or critical hazards.

**Skin contact :** No known significant effects or critical hazards. May cause slight transient irritation.

## **Over-exposure signs/symptoms**

**Eye contact :** Adverse symptoms may include the following:  
--irritation  
--redness

**Skin contact** No specific data.

**Ingestion** No specific data.

**Inhalation** Adverse symptoms may include the following:  
----respiratory tract irritation

## **5. Fire Fighting Measures**

Extinguishing Media: Non-combustible product. Use extinguishing media for underlying cause of fire.

Specific Hazards Arising from the Chemical: Heated container may burst

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

- carbon dioxide
- carbon monoxide
- nitrogen oxides

Special Fire Fight Proc: Wear positive-pressure self-contained breathing apparatus and full protective clothing. Use water spray to keep fire-exposed containers cool.

## **6. Accidental Release Measures**

Personal Precautions: Avoid contact with skin and eyes.

Protective Equipment: NIOSH-approved respirator for ammonia gas if mist or spray is present, impervious gloves, splash-proof goggles, impervious apron and footwear. Safety shower and eyewash should be available.

Emergency Procedures: Do not contaminate water supplies, lakes, streams, ponds or drains with spilled product.

Methods and Materials for Containment and Cleanup: Contain spill. If uncontaminated, collect and reuse product. If contaminated, absorb on sand or clay and place in a recovery drum for proper disposal.

## **7. Handling and Storage**

Precautions for Safe Handling: Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wash water or spray waste. Avoid containers, piping or fittings made of copper-containing alloys or galvanized metals.

Conditions for Safe Storage: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Use within 6 months of purchase date. Store unblended in original containers.

## **8. Exposure Controls / Personal Protection**

TLV/PEL: Not established

Appropriate Engineering Controls: Local exhaust should be sufficient.

Personal Protective Equipment: NIOSH-approved respirator for ammonia gas if mist or spray is present, impervious gloves, splash-proof goggles, impervious apron and footwear. Safety shower and eyewash should be available.

## **9. Physical and Chemical Properties**

Odor/Appearance: Clear liquid with haze.

Flash Point, OF: Not flammable

Boiling Point, OF: not available

Melting Point (Freezing point), OC: not available

Vapor Pressure, mm Hg @ 20 OC: 50 mm/Hg @ 21 Deg. C.

Vapor Density: Not applicable

Solubility in Water: Soluble

Molecular Formula: Not applicable, formulated mixture.

Density, g/mL @ 25 OC: 9.63 lbs / gallon

Evaporation Rate (Butyl Acetate = 1) : not known

Octanol/Water Partition Coefficient: No information found

pH: 7.0

Flammable Limits (approximate volume % in air) : Not applicable

Auto-ignition Temperature: Not applicable

Decomposition temperature: No information found

## **10. Stability and Reactivity**

Reactivity: Incompatible with halogens. May react slightly when exposed to oxidizing agents, reducing agents, acids, alkalis, and moisture. Non reactive with combustible materials, organic materials and most metals. Slightly corrosive to mild steel, aluminum, copper and zinc.

Chemical Stability: Stable

Hazardous Decomposition Products: No hazard under normal conditions

Hazardous Polymerization: Will not occur

Conditions to Avoid: Avoid high temperatures above 105 Degrees F., or greater acid contamination.

Incompatible Materials: Avoid mixing or intimate contact with strongly acidic materials.

### 11. Toxicological Information

Acute Toxicity (Oral LD50): 8471 mg/kg (rat) (urea)

Skin Irritation: Prolonged or repeated contact may irritate slightly.

Eye Irritation: Liquid contact may irritate slightly. If mist is formed, it may also irritate slightly.

Skin Sensitization: No information found

Carcinogenic: Not listed by IARC, NTP or OSHA.

Chronic Effects: None currently known.

Other Hazards: None currently known.

### 12. Ecological Information Eco-toxicity: No information found

Persistence and Degradability: No information found

Bio-accumulative Potential:

Product	LogPow	Potential
Water	-1.38	Low
Urea	<-1.73	Low

Mobility in Soil: Soil/water partition coefficient (Koc) 0.037

Mobility: Not available

Other Adverse Effects: No known significant effects or critical hazards.

### 13. Disposal Considerations

Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

### 14. Transport Information UN Proper Shipping Name: Not regulated by DOT, IATA or IMDG.

Transport Hazard Class: None

UN Identification Number: None

Packaging Group: None



Environmental Hazards: No information found

Transport in Bulk: No information found

Special Precautions for Transportation: No information found

#### **15. Regulatory Information**

National Fire Protection Association Rating:

Health: 0

Fire: 0

Reactivity: 0

Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No): No

Immediate (Acute) Health: Y

Delayed (Chronic) Health: N

Sudden Release of Pressure: N

Fire: N

Reactive: N

#### **16. Other Information**

Date of Preparation/Revision: March 24, 2016/December 21,2021