



# Urea-Ammonium Nitrate Solution with 4% Sulfur

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (WHMIS 2015)  
Revision Date: September 2018

Version: 1.0

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Name:** Urea-Ammonium Nitrate Solution with 4% Sulfur

**Synonyms:** UAN Solution with 4% S

**Intended Use of the Product** Not available

#### Name, Address, and Telephone of the Responsible Party

##### Company

LSB Chemical L.L.C.  
1080 Industrial Drive  
Cherokee, AL 35616  
T (256) 359-7000 – F (256) 359-4450

#### Emergency Telephone Number

**Emergency number** : (256) 359-7000, (800) 424-9300 (CHEMTREC, 24 hours)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### Classification (GHS-US)

Ox. Liq. 3 H272

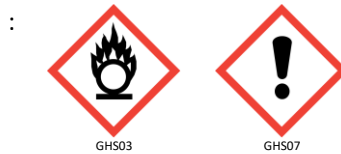
Eye Irrit. 2A H319

Aquatic Acute 3 H402

#### Label Elements

##### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Warning

##### Hazard Statements (GHS-US)

: H272 - May intensify fire; oxidizer  
H319 - Causes serious eye irritation  
H402 - Harmful to aquatic life

##### Precautionary Statements (GHS-US)

: P210 - Keep away from heat, sparks, open flames, hot surfaces, ignition sources, combustible materials, organic materials. - No smoking.  
P220 - Keep/Store away from combustible materials, organic materials.  
P221 - Take any precaution to avoid mixing with combustible materials, organic materials.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use appropriate media for extinction.  
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

#### Other Hazards

**Other Hazards Not Contributing to the Classification:** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US)** Not available

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

#### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	29 - 34	Not classified
Ammonium nitrate	(CAS No) 6484-52-2	28 - 33	Ox. Sol. 3, H272 Eye Irrit. 2A, H319
Urea	(CAS No) 57-13-6	22 - 27	Not classified
Ammonium sulfate	(CAS No) 7783-20-2	3 - 7	Aquatic Acute 2, H401
Ammonium sulfite	(CAS No) 10196-04-0	3 - 7	Not classified
Ammonium bisulfite	(CAS No) 10192-30-0	3 - 7	Skin Corr. 1C, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Eye irritation.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** May cause skin irritation.

**Eye Contact:** Causes serious eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Not available

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice or attention.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Water spray.

**Unsuitable Extinguishing Media:** Dry chemical, carbon dioxide, or regular foam.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** May intensify fire; oxidizer. Will burn if exposed to heat, and in addition, will accelerate the burning of other combustibles, resulting in more rapid spread of fire.

**Explosion Hazard:** Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Smothering, contact with organic material, or combustible material may cause an explosive situation.

**Reactivity:** May cause or intensify fire; oxidizer. May accelerate the burning of other combustible materials. Smothering, contact with organic material, or combustible material may cause an explosive situation.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Nitrogen oxides. Toxic fumes are released. Carbon oxides (CO, CO<sub>2</sub>). Ammonia. Sulfur oxides.

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**Other information:** Do not add water to molten material as this may cause spattering. Do not allow run-off from fire fighting to enter drains or water courses.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing (vapors, mist, spray). Do not get in eyes, on skin, or on clothing. Keep away from combustible material.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill. Do not take up in combustible material such as: saw dust or cellulosic material.

### Reference to Other Sections

See section 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Additional Hazards When Processed:** When heated to decomposition, emits toxic fumes. Smothering, contact with organic material, or combustible material may cause an explosive situation. Do not puncture or incinerate container.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Keep/Store away from combustible materials, extremely high or low temperatures, direct sunlight, ignition sources, incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Halogens (F, Cl, Br, I). Chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. Organic materials. Combustible materials.

**Specific End Use(s)** Not available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

<b>Ammonia (7664-41-7)</b>		
Mexico	OEL TWA (mg/m <sup>3</sup> )	18 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	25 ppm
Mexico	OEL STEL (mg/m <sup>3</sup> )	27 mg/m <sup>3</sup>
Mexico	OEL STEL (ppm)	35 ppm
USA ACGIH	ACGIH TWA (ppm)	25 ppm
USA ACGIH	ACGIH STEL (ppm)	35 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	35 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	18 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	25 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	27 mg/m <sup>3</sup>

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USA NIOSH	NIOSH REL (STEL) (ppm)	35 ppm
USA IDLH	US IDLH (ppm)	300 ppm
Alberta	OEL STEL (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
Alberta	OEL STEL (ppm)	35 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	25 ppm
British Columbia	OEL STEL (ppm)	35 ppm
British Columbia	OEL TWA (ppm)	25 ppm
Manitoba	OEL STEL (ppm)	35 ppm
Manitoba	OEL TWA (ppm)	25 ppm
New Brunswick	OEL STEL (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
New Brunswick	OEL STEL (ppm)	35 ppm
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	25 ppm
Newfoundland & Labrador	OEL STEL (ppm)	35 ppm
Newfoundland & Labrador	OEL TWA (ppm)	25 ppm
Nova Scotia	OEL STEL (ppm)	35 ppm
Nova Scotia	OEL TWA (ppm)	25 ppm
Nunavut	OEL STEL (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
Nunavut	OEL STEL (ppm)	35 ppm
Nunavut	OEL TWA (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
Nunavut	OEL TWA (ppm)	25 ppm
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (ppm)	35 ppm
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (ppm)	25 ppm
Ontario	OEL STEL (ppm)	35 ppm
Ontario	OEL TWA (ppm)	25 ppm
Prince Edward Island	OEL STEL (ppm)	35 ppm
Prince Edward Island	OEL TWA (ppm)	25 ppm
Québec	VECD (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
Québec	VECD (ppm)	35 ppm
Québec	VEMP (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
Québec	VEMP (ppm)	25 ppm
Saskatchewan	OEL STEL (ppm)	35 ppm
Saskatchewan	OEL TWA (ppm)	25 ppm
Yukon	OEL STEL (mg/m <sup>3</sup> )	30 mg/m <sup>3</sup>
Yukon	OEL STEL (ppm)	40 ppm
Yukon	OEL TWA (mg/m <sup>3</sup> )	18 mg/m <sup>3</sup>
Yukon	OEL TWA (ppm)	25 ppm

### Exposure Controls

**Appropriate Engineering Controls:** Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment.

**Personal Protective Equipment:** Face shield. Gloves. Insufficient ventilation: wear respiratory protection. Protective clothing.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or face shield

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**Skin and Body Protection:** Neoprene, nitrile or PVC gloves and protective clothing recommended.

**Respiratory Protection:** Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Not available
Odor	: Not available
Odor Threshold	: Not available
pH	: 8 – 8.5
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: ~107.22 °C (225°F) (32% solution)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: 1 mm Hg @37.8°C (100°F)
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.24-1.33 @15.6°C (60°F)
Solubility	: 100% soluble in water.
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not available
Explosion Data – Sensitivity to Static Discharge	: Not available

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** May cause or intensify fire; oxidizer. May accelerate the burning of other combustible materials. Smothering, contact with organic material, or combustible material may cause an explosive situation.

**Chemical Stability:** May intensify fire; oxidizer.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame. Combustible materials. Sources of ignition. Incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Halogens. Chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Toxic vapors. Ammonia. Sulfur oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified. **pH: 8 - 8.5**

**Serious Eye Damage/Irritation:** Causes serious eye irritation. **pH: 8 - 8.5**

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

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**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

### Information on Toxicological Effects - Ingredient(s)

#### LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Urea (57-13-6)	
ATE (oral)	8471.000 mg/kg
Ammonium nitrate (6484-52-2)	
LD50 Oral Rat	2217 mg/kg
LC50 Inhalation Rat (mg/l)	> 88.8 mg/l/4h
Ammonium sulfate (7783-20-2)	
LD50 Oral Rat	2000 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Harmful to aquatic life.

Urea (57-13-6)	
LC50 Fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Ammonium sulfate (7783-20-2)	
LC50 Fish 1	5.2 (5.2 - 8.2) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	32.2 (32.2 - 41.9) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

### Persistence and Degradability

Urea-Ammonium Nitrate Solution with 4% Sulfur	
Persistence and Degradability	Not established.

### Bioaccumulative Potential

Urea-Ammonium Nitrate Solution with 4% Sulfur	
Bioaccumulative Potential	Not established.
Urea (57-13-6)	
BCF fish 1	< 10
Log Pow	-1.59 (at 25 °C)
Ammonium nitrate (6484-52-2)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	-3.1 (at 25 °C)
Ammonium sulfate (7783-20-2)	
Log Pow	-5.1 (at 25 °C)

**Mobility in Soil** Not available

### Other Adverse Effects

**Other Information:** Avoid release to the environment.

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### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Additional Information:** Clean up even minor leaks or spills if possible without unnecessary risk.

### SECTION 14: TRANSPORT INFORMATION

**14.1 In Accordance with DOT** Not regulated for transport

**14.2 In Accordance with IMDG** Not regulated for transport

**14.3 In Accordance with IATA** Not regulated for transport

**14.4 In Accordance with TDG** Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### US Federal Regulations

<b>Urea-Ammonium Nitrate Solution with 4% Sulfur</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Reactive hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Urea (57-13-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Ammonium nitrate (6484-52-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Ammonium sulfate (7783-20-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Ammonium sulfite (10196-04-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Ammonium bisulfite (10192-30-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

#### US State Regulations

<b>Urea (57-13-6)</b>
U.S. - Minnesota - Hazardous Substance List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term
<b>Ammonium nitrate (6484-52-2)</b>
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728) U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1 U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2 U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1 U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2 RTK - U.S. - Massachusetts - Right To Know List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New Jersey - Special Health Hazards Substances List RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List RTK - U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

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### Ammonium sulfate (7783-20-2)

U.S. - California - SCAQMD - Toxic Air Contaminants With Proposed Risk Values  
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
RTK - U.S. - Massachusetts - Right To Know List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term

### Ammonium sulfite (10196-04-0)

U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Louisiana - Reportable Quantity List for Pollutants  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Polluting Materials List  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term

### Ammonium bisulfite (10192-30-0)

U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Louisiana - Reportable Quantity List for Pollutants  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Polluting Materials List  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term

### Canadian Regulations

#### Urea-Ammonium Nitrate Solution with 4% Sulfur

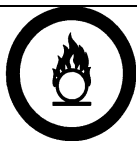
WHMIS Classification	Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### Urea (57-13-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### Ammonium nitrate (6484-52-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Class C - Oxidizing Material  
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

### Ammonium sulfate (7783-20-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### Ammonium sulfite (10196-04-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### Ammonium bisulfite (10192-30-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification Class E - Corrosive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision date** : September 2018

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

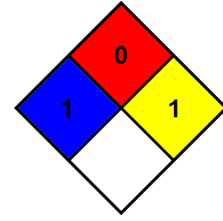
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Ox. Liq. 3	Oxidizing liquids Category 3
Ox. Sol. 3	Oxidizing solids Category 3
Skin Corr. 1C	Skin corrosion/irritation Category 1C
H272	May intensify fire; oxidizer
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H401	Toxic to aquatic life

# Urea-Ammonium Nitrate Solution with 4% Sulfur

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (WHMIS 2015)

- NFPA Health Hazard** : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA Fire Hazard** : 0 - Materials that will not burn.
- NFPA Reactivity** : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



### Party Responsible for the Preparation of This Document

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

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