Safety Data Sheet

SECTION 1 – IDENTIFICATION

Name, Address, and Telephone of the Responsible Party
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Salt Lake City, Utah 84121
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SDS #: 1022
Date: 07/20/2020
Supersedes: 04/12/2016

Product Identifier: **SDS 1022**
Product Name:
Ammonium Nitrate Solution 50-70%

Other Means of Identification
Synonyms:
Ammonium Nitrate Solution 50-70%
AN Solution

Intended Use of the Product
Used in the manufacture of UAN and AN Prill

Emergency Telephone Number
FOR 24 HOUR EMERGENCY, CALL **CHEMTREC (USA) 800-424-9300**
CANUTEC (CANADA) 613-996-6666

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the Substance or Mixture
Classification (GHS-US)
Eye Irrit. 2B H320
Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning
Hazard Statements (GHS-US) : H320 – Causes eye irritation.

Precautionary Statements (GHS-US) : P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
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.

Other Hazards
Hazards Not Otherwise Classified (HNOC): Not available

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Ingredient Classification (GHS-US)
Water	CAS No) 7732-18-5	30-50	Not classified

Ammonium nitrate	(CAS No) 6484-52-2	50-70	Ox. Sol. 3, H272 Eye Irrit. 2B, H320

Ingredients, other than those mentioned above, as used in this product are not hazardous as defined under current Department of Labor regulations or are present in deminimus concentrations (less than 0.1% for carcinogens, less than 1.0% for other hazardous materials).

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: Allow breathing of fresh air. Allow the victim to rest.

Skin Contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

Eye Contact: May cause eye irritation.

Indication of Any Immediate Medical Attention and Special Treatment Needed

No additional information available.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray.

Unsuitable Extinguishing Media: Use heavy water stream.

Special Hazards Arising from the Substance or Mixture

Advice for Firefighters

Precautionary Measures Fire: Hot AN solution may also ignite combustibles such as wood, paper, oil, clothing, etc. It will support and increase the rate of combustion in the presence of flammable or combustible materials even in the absence of oxygen. As it is an oxidizer, fires involving AN cannot be extinguished by conventional firefighting methods that “smother” a fire by excluding oxygen (air). When heated it will melt, decompose and release toxic gases including nitric acid vapor, nitrogen oxides (NOx) and ammonia gas (NH3). These gases can recombine as they cool, forming a white cloud of AN fumes that is both confusing and a visibility issue for emergency responders. When heated excessively (e.g. as in a fire) it can cause an explosion in an enclosed space and closed containers or vessels may rupture violently.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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

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 (vapor, mist, spray, gas). Do not get in eyes, on skin, or on clothing. Keep away from combustible material.

For Non-Emergency Personnel

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. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up
For Containment: Dike and contain spill. Notify authorities in accordance with emergency response procedures. Only personnel trained in emergency response should respond. Contain with inorganic absorbents – do not use combustible material such as sawdust or cellulosic material.
Methods for Cleaning Up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Reference to Other Sections
See heading 8, Exposure Controls and Personal Protection

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Conditions for Safe Storage, Including Any Incompatibilities
Storage Conditions: Keep only in a cool, well ventilated place away from: Keep container closed when not in use.
Incompatible Materials: Strong bases, strong acids. copper, copper bearing alloys, mild steels, wood products, chlorides, chrome.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
No additional information available.

Exposure Controls
Appropriate Engineering Controls: Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment: Avoid all unnecessary exposure.

Materials for Protective Clothing: Heat and chemical resistant materials and fabrics advised.
Hand Protection: Wear protective gloves.
Eye Protection: Chemical goggles or safety glasses.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Clear, colorless liquid
Odor	:	Characteristic
Odor Threshold	:	Not available
pH	:	4.5-5
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available

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	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific gravity / density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Water: Solubility in water of component(s) of the mixture: ammonium nitrate: 190 g/100ml
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not sensitive to mechanical impact. Protect material from drying out.
Explosion Data – Sensitivity to Static Discharge	:	Not sensitive to static discharge.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Hazardous reactions are unlikely to occur under normal circumstances. High water content significantly reduces or eliminates the ability of ammonium nitrate to intensify fire, accelerate the burning of other combustible materials or to quickly or violently react as an oxidizer

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high temperatures and/or evaporating off excessive water. Incompatible materials.

Incompatible Materials: Dissolved metals (copper, zinc, iron, cadmium, manganese, nickel, chromium) act as a catalyst for decomposition. The total level of these heavy metal contaminants should be maintained to less than 50 ppm. Copper should be maintained to less than 1 ppm. Strong acids. Strong bases. Strong oxidizers. Halogens. Chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. Combustible materials. Organic materials.

Hazardous Decomposition Products: Nitrogen oxides (NO_X),. Ammonia (NH_3). Nitric acid (HNO_3).

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: 4.5-5

Serious Eye Damage/Irritation: Causes eye irritation

pH: 4.5 - 5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

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: May cause eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None known.
Additional Information: Extreme thermal burn damage to skin and tissue.

Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:

Ammonium nitrate (6484-52-2)	
LD50 Oral Rat	4820 mg/kg
LC50 dermal rabbit	> 3000 mg/kg
ATE US (oral)	4820 mg/kg bodyweight

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability

Ammonium Nitrate solution 20 %	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Ammonium Nitrate solution 20 %	
Bioaccumulative Potential	Not established.
Ammonium nitrate (6484-52-2)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	-3.1 (at 25 °C)

Mobility in Soil Not available
Other Adverse Effects
Other Information: Avoid release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose in a safe manner in accordance with local/ national regulations.
Additional Information: Avoid release to the environment.

SECTION 14 - TRANSPORT INFORMATION

In Accordance with DOT
Not regulated for transport
In Accordance with IATA
No additional information available.
In Accordance with TDG
No additional information available.

SECTION 15 - REGULATORY INFORMATION

US Federal Regulations

Ammonium nitrate (6484-52-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Canadian Regulations

Ammonium Nitrate solution 20-50%	
WHMIS Classification	No additional information available.

Ammonium nitrate (6484-52-2)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification — No additional information available.
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 : 07/20/2020
Other Information : None
GHS Full Text Phrases:

Eye Irrit. 2B	Eye irritation Category 2B
H320	May cause eye irritation

Party Responsible for the Preparation of This Document
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