

Ammonium Bisulfite Solution 65%

Safety Data Sheet

Date of issue: 12/12/2023

Revision date: 12/12/2023

Version: #2

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Substance name	: Ammonium Bisulfite Solution 65%
CAS-No.	: 10192-30-0
Formula	: NH_4HSO_3
Synonyms	: Ammonium Hydrogen Sulfite / Ammonium Sulfite

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Industrial use
Recommended use	: Commodity & Laboratory chemicals
Restrictions on use	: Not for food, drug or household use

1.3. Supplier

FARSA Group Ltd
Sales@farsagroup.az

1.4. Emergency contacts

Emergency number: **+994512707856**

SECTION 2: Hazard(s) identification

2.1. Hazard classification:

Health	Skin Corrosive/Irritation	Category 2
	Eye Damage/Irritation	Category 2A
Physical	None	

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: **WARNING**

Hazard statements (GHS-US)

: Causes skin irritation
Causes serious eye irritation

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Precautionary statements (GHS-US) : **If on skin:** Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: get medical advice/attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.
Wash hands and face thoroughly with soap and water after handling.
Wear neoprene rubber gloves and apron, chemical goggles and full-face shield.
Do not allow release to aquatic waterway

2.3. Unclassified Hazard(s)

Aquatic toxicity

2.4. Unknown acute toxicity (GHS US)

None

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	EINECS No.	% By Wt.
Ammonium Hydrogen Sulfite	(CAS-No.) 10192-30-0	233-469-7	60-70
Water	(CAS-No.) 7732-18-5	231-791-2	Remaining

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Symptoms/Effects

Acute : Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.

Chronic : No known chronic effects

4.2. Eyes

Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation persists.

4.3. Skin

Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation persists.

4.3. Ingestion

If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

4.5. Inhalation

Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

SECTION 5: Fire-fighting measures

5.1. Flammable Properties

NFPA: Health - 1 Flammability - 0 Reactivity - 1

5.2. Extinguishing Media

Suitable Extinguishing Media : Not flammable, use media suitable for combustibles involved in fire.

Unsuitable Extinguishing Media : Not applicable

5.3. Protection of firefighters

Specific Hazards Arising from the Chemical : Evolution of Sulfur dioxide vapors, a severe respiratory irritant. Product is corrosive to skin and eyes.
Physical hazards : Heating (flames) of closed/sealed containers may cause violent rupture of container due to thermal expansion of compressed gases. Keep containers cool.

Chemical hazards : Heating causes release of Sulfur dioxide vapors. Vapors are very irritating to eyes, skin and respiratory tract. Heating to dryness may cause the release of Oxides of Sulfur (respiratory hazard).

Protective Equipment and Precautions for Firefighters : Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray. Heating this product will evolve Sulfur dioxide, a severe respiratory irritant.

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SECTION 6: Accidental release measures

6.1. Personal Precautions

Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

6.2. Environmental Precautions

Keep out of "waters of the United States" because of potential aquatic toxicity (See Section 12).

6.3. Methods of Containment

Small Release: Confine and absorb small releases on sand, earth or other inert absorbents.

Large Release: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains and sewers.

6.1 Methods for Cleanup:

Small Release: Shovel up absorbed material and place in drums for disposal as a chemical waste.

Large Release: Recover as much of the spilled product using portable pump and hoses. Use as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

SECTION 7: Handling and storage

7.1. Handling

Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid contact with the skin

7.2. Storage

SECTION 8: Exposure controls/personal protection

Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5 for materials of construction)

8.1. Exposure Guidelines

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL	TWA	STEL

Sulfur dioxide	5 ppm	0.25 ppm	None	0.25 ppm
Ammonium hydrogen sulfite	None	None	None	None
Water	None	None	None	None

8.2. Engineering controls

Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety showers in areas where product is used.

8.3. Personal protective equipment (PPE)

Eye/Face Protection: Chemical goggles and a full face shield.

Skin Protection: Neoprene rubber gloves, boots and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.

Respiratory Protection: Use a properly fitted, air purifying or air-fed respirator complying with NIOSH/MSHA standards and based on the anticipated exposure levels of sulfur dioxide.

Hygiene Considerations: Common good industrial hygiene practices should be followed, such as washing thoroughly after handling/before eating/drinking or after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Clear pale-yellow liquid
Odor:	Pungent irritating odor
Odor Threshold:	0.3 to 5 ppm (sulfur dioxide)
pH:	4.5-5.5 (typical)
Melting Point/Freezing Point:	Salt Out Temperature -22 to >70°F (-30 to >20°C) (typical)

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Boiling Point:	760 mm Hg
Flash Point:	Not applicable
Evaporation Rate:	Not determined
Flammability:	Not applicable
Upper/Lower Flammability Limits:	Not applicable
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Relative Density:	1.32 – 1.38 @ 25 °C
Solubility:	Complete
Partition Coefficient:	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not determined
Viscosity:	7.65 cP

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is reactive (See Section 10.5).

10.2. Chemical stability

This is a stable product under normal (ambient) temperature and pressure.

10.3. Possibility of hazardous reactions

High heat in enclosed containers. (See Section 10.6.)

10.4. Conditions to avoid

High heat and fire conditions.

10.5. Incompatible materials

Strong oxidizers such as nitrates, nitrites or chlorates. Acids will cause the release of Sulfur dioxide, a severe respiratory irritant. Alkaline materials will accelerate the evolution of Ammonia. **Ammonium bisulfite is not compatible with Copper, Zinc or their alloys (i.e. bronze, brass, galvanized metals, etc.).** These materials of construction should not be used in handling systems or storage containers for this product.

10.6. Hazardous decomposition products

Heating this product in an enclosed container above 75°F may generate Ammonium bisulfate, Ammonium sulfate, and Sulfur along with considerable heat and increased Sulfur dioxide vapor pressure..

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Oral:	No data available.
Dermal:	No data available.
Inhalation:	Inhalation Rat LC50: 2,520 ppm, 1 hour (sulfur dioxide).
Eyes:	No data available.
Chronic/Carcinogenicity:	Not listed in NTP, IARC or by OSHA.
Teratology:	No data available.
Reproduction:	No data available.
Mutagenicity:	No data available.

SECTION 12: Ecological information

Ecotoxicity:	No data available, however, ammonium compounds typically are detrimental to aquatic species.
Persistence & Degradability:	No data available.

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Bio accumulative Potential: This product is not bio accumulative.

Mobility in Soil: No data available.

Other Adverse Effects: None

SECTION 13: Disposal considerations

Consult federal, state and local regulations for disposal requirements.

SECTION 14: Transport information

14.1. Incompatible materials

Not regulated.

SECTION 15: Regulatory information

15.1. Regulations

OSHA: This product is considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200)

TSCA: Product is contained in USEPA Toxic Substance Control Act Inventory.

CERCLA: Reportable Quantity – Yes, 5,000 lbs.

SARA Title III:

Extremely Hazardous Substance (EHS): No

Section 312 (Tier II) Ratings:

Immediate (acute): Yes

Fire: No

Sudden Release: No

Reactivity: Yes

Delayed (chronic): No

Section 313 (FORM R): Yes, ammonia solution.

RCRA: No

CAA (Hazardous Air Pollutant/HAP): Not applicable

15.2. International Regulations


Canada:

WHMIS: Class E, D2B

DSL/NDSL: Listed in DSL, Record No. 9408

15.2. State Regulations

CA Proposition 65:

 **WARNING:** This product can expose you to chemicals including sulfur dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65.Warnings.ca.gov