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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier **Ammonium Sulfite Monohydrate**

Synonyms: Not applicable.

Chemical Abstracts Registry No: 7783-11-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Fertilizer, spray adjuvant, food additive, laboratory use

1.3. Details of the supplier of the safety data sheet

Vertellus LLC
P.O. Box 730,
Delaware Water Gap, PA
800-344-3426

e-mail Address: sds@vertellus.com

1.4. Emergency telephone number

Vertellus: 1-800-344-3426
CHEMTREC (USA): 1-800-424-9300 (collect calls accepted)
CHEMTREC (International): 1-703-527-3887 (collect calls accepted)
NRCC (China): +86 532 83889090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008, 29 CFR 1910.1200 and the Globally Harmonized System)

Not classified as hazardous under this directive.

2.2. Label elements

Hazard Precautions: Not classified as hazardous under this directive.

Prevention Precautionary Statements: Note: These precautionary statements are not prescribed by directive 1272/2008 as this product is not classified as hazardous under this directive. Wash hands thoroughly after handling with soap and water. Wear protective gloves, protective clothing, eye protection and face protection. If swallowed, in eyes, on skin or inhaled call a poison center or doctor/physician if you feel unwell. If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing. Take off contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed.

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SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (weight %)	EC Number	CLP Inventory/ Annex VI	EU CLP Classification (1272/2008)
Ammonium Sulfite	7783-11-1	100%	233-484-9	Not listed	Not Classified as Hazardous

NOTE: See Section 8 for exposure limit data for these ingredients. See Section 15 for trade secret information (where applicable). See Section 16 for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

Eye Contact: Rinse eyes immediately with large amounts of water for at least 15 minutes, occasionally lifting the eyelids. Get medical attention if irritation or other symptoms exist.

Inhalation: Remove from exposure. If not breathing, give artificial respiration and call a physician.

Ingestion: If swallowed, do not induce vomiting. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Acute: Not expected to be irritating to skin or eyes. Not toxic by oral, dermal or inhalation routes. Not a sensitizer.

Delayed Effects: None known.

4.3. Indication of any immediate medical attention and special treatment needed

Note to Physician: No specific indications. Treatment should be based on the judgment of the physician in response to the reactions of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Water spray, water fog, alcohol-resistant foam, carbon dioxide, dry chemical.

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: Carbon dioxide, Carbon monoxide Ammonia

Potential for Dust Explosion: No data available -- handle in a manner that prevents generation of potentially explosive dust.

Special Flammability Hazards: Not applicable.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Evacuate area and fight fire from a safe distance.

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Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers and waterways.

6.3. Methods and material for containment and cleaning up

Wear protective equipment during clean-up. Remove all ignition sources. Ventilate the area of spill or leak. Isolate the spill area, preventing entry by unauthorized persons. Carefully scoop up and place into appropriate disposal container. After collection of material, flush area with water. Dispose of contents & container in accordance with local, regional, national or international regulations.

6.4. Reference to other sections

Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for Unique Hazards: Not applicable.

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material. Do not eat, drink or smoke in work areas. Prevent contact with incompatible materials. Avoid spills and keep away from drains. Handle in a manner to prevent generation of aerosols, vapors or dust clouds.

Special Handling Equipment: Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: Keep container closed when not in use.

Dangerous Incompatibility Reactions: Strong oxidizers, strong bases, potassium chlorate, potassium nitrite and sodium hypochlorite.

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Country	Occupational Exposure Limit
Canada - Quebec, Singapore, S. Korea	10 mg/m3 as an 8-hour time-weighted average
Belgium, New Zealand	10 mg/cubic meter (inhalable); 3 mg/cubic meter (respirable fraction)
US OSHA	15 mg/cubic meter (total dust); 5 mg/cubic meter (respirable fraction)

Air Monitoring Method: Gravimetric analysis for total particulate and respirable fraction (<10 microns).

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Other Engineering Controls: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. All operations should be conducted in well-ventilated conditions.

Personal Protective Equipment: Goggles or glasses with side shields. Latex rubber gloves are recommended where contact is likely. Where overexposures are a concern, use NIOSH-approved dust/mist respirator as necessary.

Respirator Caution: Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.

Environmental Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature): Essentially odorless white to off-white solid

Molecular Formula:	(NH4)2SO3 • H2O	**Molecular Weight:**	134.16
Vapor Pressure:	No data available.	**Evaporation Rate:**	No data available
Specific Gravity or Density:	1.41 g/cm3 @ 20C	**Vapor Density (air = 1):**	00_NOTAVL
Boiling Point:	No data available.	**Freezing / Melting Point:**	150°C (SUBLIMES); > 280 °C
Solubility in Water:	Very soluble (642 g/L @ 25C)	**Octanol / Water Coefficient:**	No data available.
pH:	No data available.	**Odor Threshold:**	No data available.
Viscosity:	No data available.	**Autoignition Temperature:**	Not flammable
Flash Point and Method:	No data available.	**Flammable Limits:**	Not flammable
Flammability (solid, gas):	Not flammable	**Decomposition Temperature:**	60 - 70 °C
Explosive Properties:	Not explosive	**Oxidizing Properties:**	Not an oxidizer

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SECTION 10: Stability and reactivity

10.1. Reactivity	Not classified as dangerously reactive.
10.2. Chemical stability	Stable
10.3. Possibility of hazardous reactions	Polymerization is not expected to occur
10.4. Conditions to avoid	There are no known unusual fire or explosion hazards associated with this material.
10.5. Incompatible materials	Strong oxidizers, strong bases, potassium chlorate, potassium nitrite and sodium hypochlorite.
10.6. Hazardous decomposition products	Products of incomplete combustion may include carbon monoxide, carbon dioxide, nitrogen oxides, and dense smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD_{50}:	(rat) 2746 mg/ kg
Acute Dermal LD_{50}:	Rat > 2000 mg/ kg
Acute Inhalation LC_{50}:	(4 h, rat) > 5.5 mg/L
Skin Irritation:	Non-irritating to skin.
Eye Irritation:	Non-irritating to eyes.
Skin Sensitization:	Not a sensitizer
Mutagenicity:	No evidence of mutagenic effects
Reproductive / Developmental Toxicity:	No evidence of reproductive effects
Carcinogenicity:	No evidence of carcinogenic effects
Target Organs:	None known
Primary Route(s) of Exposure:	Skin contact and absorption, eye contact, and inhalation. Ingestion is not likely to be a primary route of exposure.
Most important symptoms and effects, both acute and delayed	Not expected to be irritating to skin or eyes. Not toxic by oral, dermal or inhalation routes. Not a sensitizer. Delayed Effects: None known.
Additional Toxicity Information:	Toxicity endpoints listed above are for read across substances, which are expected to be similar to Ammonium Sulfite Monohydrate.

SECTION 12: Ecological information

12.1. Toxicity	No data available.
12.2. Persistence and degradability	Not applicable – inorganic substance No data available.
12.3. Bioaccumulative potential	Bioconcentration is not expected to occur.

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12.4. Mobility in soil This material is expected to have only slight mobility in soil.

12.5. Results of PBT and vPvB assessment This substance is not a PBT or vPvB.

12.6. Other adverse effects No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number: Non-Hazardous

Waste Classification: (per US regulations) The waste may be classified as "special" or hazardous per State regulations.

Waste Disposal: NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations. Dispose of this material responsibly, and in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws, and environmental protection duty of care principles. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate classification code according to the European Community List of Wastes should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

The following information applies to all shipping modes (DOT/IATA/ICAO/IMDG/ADR/RID/ADN), unless otherwise indicated:

14.1. UN number	Non-hazardous	**14.2. UN proper shipping name**	Chemicals, n.o.s. (Ammonium Sulfite Monohydrate)
14.3. Transport hazard class(es)	Not applicable	**14.4. Packing group**	Not applicable
14.5. Environmental hazards	Not applicable		
14.6. Special precautions for user	Not applicable		
NA Emergency Guidebook Numbers:	Not applicable	**IMDG EMS:**	Not applicable
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code			Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Inventory Lists:	**Status:**		
USA TSCA:	Listed	**EINECS:**	Listed (233-484-9)
Canada(DSL/NDSL):	DSL	**Japan:**	Listed
Korea:	Listed	**Australia:**	Listed
China:	Listed	**Philippines:**	Listed
Taiwan:	Listed	**New Zealand:**	Listed
German Water Hazard Classification:	WGK 1 *(self classification)*		
SARA 313:	Not Listed		

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State Regulations: This product contains chemicals listed on the Massachusetts Substance List for Right-to-Know Law.
This product contains chemicals listed on the New Jersey Department of Health Hazard Right-to-Know Program Hazardous Substance List.
This product contains chemicals listed on the Pennsylvania Department of Labor and Industry Hazardous Substance List.
This product contains chemicals listed on the New York State List of Hazardous Substances.

HMIS:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

NFPA:

15.2. Chemical safety assessment

A chemical safety assessment is not required as this substance is not classified as hazardous.

SECTION 16: Other information

Classification Method: Bridging principle - similar substance

Legend of Abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CFR = Code of Federal Regulations.
DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EINECS = European Inventory of Existing Commercial Chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal Concentration.
LD = Lethal Dose.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicology Program.
OSHA = Occupational Safety and Health Administration
PEL = Permissible Exposure Limit.
RQ = Reportable Quantity.
SARA = Superfund Amendments and Reauthorization Act of 1986.
TLV = Threshold Limit Value.
WHMIS = Workplace Hazardous Materials Information System.

Important Note: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. The information contained herein may change without prior notice. THIS SAFETY DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS.

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