

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

Manufacturer: Vertellus Health & Specialty Products LLC
300 North Meridian Street, Suite 1500
Indianapolis, Indiana 46204

Information and Emergency Phone during business hours: 800-344-3426

For use only in the event of chemical emergencies involving a spill, leak, fire, or accident with this material:
Call CHEMTREC 800 424-9300

Trade Name.....: Ammonium Sulfate 38% Solution
Chemical Name.....: Ammonium sulfate solution
Synonyms.....: Diammonium sulfate solution (38%)
.....
CAS #.....: N/A
Chemical Family.....: Solution of an inorganic salt
Product Code.....: AMSULFATESOL
Product Use.....: N/A
PIN#.....: None
WHMIS Class.....: D2B

SECTION 2. COMPOSITION/INFORMATION ON COMPONENTS

COMPONENTS	CAS #	WEIGHT %
Ammonium Sulfate	7783-20-2	38-40%
Water	7732-18-5	60-62%

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview:
Colorless liquid with a slight ammonia odor. An irritant.

Breathing:
Mists/aerosols may cause irritation, coughing, or difficult breathing.

Skin Contact:
May cause skin irritation.

Eye Contact:
Can cause eye irritation.

Swallowing:
May cause irritation, nausea, vomiting and diarrhea.

Long Term Health Effects:
Not known.

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SECTION 3. HAZARDS IDENTIFICATION

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Conditions Aggravated By Exposure:
Not known.

SECTION 4. FIRST AID MEASURES

Breathing:

Remove to fresh air. If not breathing, give artificial respiration.
If breathing is difficult, give oxygen. Seek medical attention.

Skin:

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

Eye:

Immediately flush eyes with plenty of water for at least 15 minutes,
holding eyelids apart. Get medical attention if irritation or other
symptoms develop.

Swallowing:

Get immediate medical attention. Never give anything by mouth to
an unconscious person.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point.....	N/A	N/A
Method.....	N/A	
Lower Explosive Limit.....	N/A	
Upper Explosive Limit.....	N/A	
Auto Ignition Temperature....	N/A	
Extinguishing Media.....	CO2, dry chemical, alcohol foam, water spray	

Firefighting Procedures:

Material will not burn. Evacuate area and fight fire from safe distance.
Use extinguishing media appropriate for surrounding materials. Wear
pressure-demand self-contained breathing apparatus (MSHA/NIOSH-approved
or equivalent) and full protective gear.

Unusual Fire and Explosion Hazards:

May generate ammonia and sulfur oxide gases if involved in a fire.

Sensitivity To Explosion:

None expected by mechanical impact or static discharge

Conditions Of Flammability:

Ammonium sulfate decomposes at 535 degrees F.

SECTION 6. ACCIDENTAL RELEASE MEASURES**General:**

Minimize entry of material into sewers and drainage systems. Refer to permit discharge limitations if applicable. Isolate spill area, preventing entry by unauthorized persons. Prevent skin/eye contact.

Small Spill:

Absorb spill with inert material (e.g., dry sand, earth). Place in an approved chemical waste container.

Large Spill:

Shut off leak, if safe to do so. Clean up spills immediately, observing precautions in Protective Equipment section. Contain spilled liquid with sand or earth. Retain all contaminated water for removal and treatment.

SECTION 7. HANDLING AND STORAGE**Handling:**

Use with adequate ventilation. Avoid contact with skin and eyes. Wash thoroughly after handling. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage:

Keep container closed when not in use.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**Exposure Levels:**

None established.

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to control sources of dust, mist or vapor.

Respiratory Protection:

Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use a positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Eye/Face Protection:

Use safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a face shield as needed.

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SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION ... continued

Skin Protection:

Use impervious gloves. Use clean protective body-covering clothing as needed to minimize contact with clothing and skin.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance.....	:	Colorless aqueous solution	
Odor.....	:	Odorless	
Initial Boiling Point.....	:	N/A	N/A
Final Boiling Point.....	:	N/A	N/A
Specific Gravity (Relative to Water).....	:	1.77 @ 77 F	
Vapor Density(relative to air).....	:	N/A	
Vapor Pressure (mm Hg).....	:	N/A	
pH.....	:	N/A	
Solubility in Water.....	:	Completely	
Freezing/Melting Point.....	:	N/A	
Octanol/water Partition Coefficient.....	:	N/A	
Odor Threshold.....	:	N/A	
Viscosity.....	:	N/A	
Evaporation Rate (relative to n-Butylacetate)	:	N/A	

SECTION 10. STABILITY AND REACTIVITY

Stable:
Yes.

Strong Oxidizer:
No.

Hazardous Polymerization:
Not prone to hazardous polymerization.

Incompatibility:
Reaction with sodium hypochlorite gives the unstable explosive nitrogen trichloride. Reaction with oxidizers like potassium chlorate, potassium nitrite, or potassium nitrate may present an explosion hazard in a fire.

Conditions to Avoid:
Contact with incompatible materials.

Hazardous Decomposition Products:
When heated to decomposition this material releases toxic fumes of NO_x, SO_x, and ammonia.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicology:

Ammonium Sulfate (CAS# 7783-20-2);
Oral LD50, rat; 2840 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Mosquito fish TLm; 1,290 ppm/96-hr
Daphnia magna TLm; 292 ppm/96-hr

Chemical Fate:

Not available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Dispose of in accordance with all federal, state, and local regulations.

Container Disposal:

Dispose of in accordance with all federal, state, and local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Shipping Name...: Not regulated
Hazard Class.....:
Packing Group.....:
UN/NA No.:
DOT Labels.....:
Subsidiary Label....:
DOT Placards.....:

IMO Shipping Name...: Not regulated
Hazard Class.....:
Packing Group.....:
UN No.:
IMO Labels.....:
Subsidiary Label....:

IATA Shipping Name...: Not regulated
Hazard Class.....:
Packing Group.....:
UN No.:
IATA Labels.....:
Subsidiary Label....:

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Chronic Health Hazard : no
 SARA 311/312 Acute Health Hazard.. : yes
 SARA 311/312 Fire Hazard..... : no
 SARA 311/312 Sudden Pressure..... : no
 SARA 311/312 Reactivity Hazard.... : no

Section 302 Extremely Hazardous:

Ingredients	CAS #	Weight %	TPQ
** None **			

CERCLA Hazardous Substances:

Ingredients	CAS #	Weight %	RO
** None **			

Section 313 Toxic Chemicals:

Ingredients	CAS #	Weight %
Ammonium Sulfate	7783-20-2	38-40%

NJ Environmental Hazardous Substance List:

Ingredients	CAS #
** None **	

California Proposition 65 Ingredients:

Ingredients	CAS #	Weight %
** None **		

TSCA:

This substance is listed on the TSCA inventory.

DSL/EINECS:

This substance is listed on the Canadian Domestic Substances List & the European Inventory of Existing Commercial Chemical Substances

WHMIS:

This MSDS was prepared in accordance with Canadian Controlled Product Regulations. This product meets hazard class criterion D2B.

SECTION 16. OTHER INFORMATION

NFPA Hazard Ratings:		HMIS Hazard Rating:	
Health.....	: 2	Health.....	: 2
Fire.....	: 0	Fire.....	: 0
Reactivity.....	: 0	Reactivity.....	: 0
Specific Hazard....	: None		

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SECTION 16. OTHER INFORMATION

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NOTE:

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