

AMMONIUM SULFATE

AMS

CAUTIONARY RESPONSE INFORMATION

Common Synonyms	Solid	White	Odorless
	Sinks and mixes with water.		
Isolate and remove discharged material. Notify local health and pollution control agencies.			
Fire	Not flammable.		
Exposure	Not harmful.		
Water Pollution	Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.		

1. CORRECTIVE RESPONSE ACTIONS Dilute and disperse Stop discharge	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed 2.2 Formula: (NH ₄) ₂ SO ₄ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed 2.5 CAS Registry No.: 7783-20-2 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51481
3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Currently not available 3.2 Symptoms Following Exposure: Currently not available 3.3 Treatment of Exposure: Currently not available 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD ₅₀ = 58 mg/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Not pertinent 3.10 Vapor (Gas) Irritant Characteristics: Not pertinent 3.11 Liquid or Solid Characteristics: Not pertinent 3.12 Odor Threshold: Not pertinent 3.13 IDLH Value: Not listed. 3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed	

4. FIRE HAZARDS 4.1 Flash Point: Not flammable 4.2 Flammable Limits in Air: Not flammable 4.3 Fire Extinguishing Agents: Not pertinent 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent 4.5 Special Hazards of Combustion Products: Not pertinent 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: Not flammable 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Not flammable 4.10 Adiabatic Flame Temperature: Not pertinent 4.11 Stoichiometric Air to Fuel Ratio: Not pertinent 4.12 Flame Temperature: Not pertinent 4.13 Combustion Molar Ratio (Reactant to Product): Currently not available 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	7. SHIPPING INFORMATION 7.1 Grades of Purity: Currently not available 7.2 Storage Temperature: Currently not available 7.3 Inert Atmosphere: Currently not available 7.4 Venting: Currently not available 7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available								
5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent	8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Not listed 8.2 49 CFR Class: Not pertinent 8.3 49 CFR Package Group: Not listed. 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: <table border="1"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>0 3</td> </tr> <tr> <td>Flammability (Red).....</td> <td>0 0</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0 0</td> </tr> </table> 8.6 EPA Reportable Quantity: Not listed 8.7 EPA Pollution Category: Not listed 8.8 RCRA Waste Number: Not listed 8.9 EPA FWPCA List: Not listed	Category	Classification	Health Hazard (Blue).....	0 3	Flammability (Red).....	0 0	Instability (Yellow).....	0 0
Category	Classification								
Health Hazard (Blue).....	0 3								
Flammability (Red).....	0 0								
Instability (Yellow).....	0 0								
6. WATER POLLUTION 6.1 Aquatic Toxicity: 1290 ppm/96 hr/mosquitofish/fresh water/TL _m 292 ppm/96 hr/Daphnia magna/fresh water/TL _m 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): None 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Bioaccumulation: 0 Damage to living resources: 1 Human Oral hazard: 1 Human Contact hazard: 0 Reduction of amenities: 0	9. PHYSICAL & CHEMICAL PROPERTIES 9.1 Physical State at 15° C and 1 atm: Solid 9.2 Molecular Weight: 132.14 9.3 Boiling Point at 1 atm: Not pertinent 9.4 Freezing Point: Not pertinent 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 1.78 at 15°C (solid) 9.8 Liquid Surface Tension: Not pertinent 9.9 Liquid Water Interfacial Tension: Not pertinent 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent 9.12 Latent Heat of Vaporization: Not pertinent 9.13 Heat of Combustion: Not pertinent 9.14 Heat of Decomposition: Not pertinent 9.15 Heat of Solution: Not pertinent 9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: Currently not available 9.18 Limiting Value: Currently not available 9.19 Reid Vapor Pressure: Currently not available								
NOTES									

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
34	50.780		N		N		N
36	51.960		O		O		O
38	53.150		T		T		T
40	54.340		P		P		P
42	55.530		E		E		E
44	56.720		R		R		R
46	57.910		T		T		T
48	59.100		I		I		I
50	60.290		N		N		N
52	61.480		E		E		E
54	62.660		N		N		N
56	63.850		T		T		T
58	65.040		E		E		E
60	66.230		N		N		N
62	67.419		T		T		T
64	68.610						
66	69.799						
68	70.990						
70	72.179						
72	73.360						
74	74.549						
76	75.740						
78	76.929						
80	78.120						
82	79.309						
84	80.500						