

AMMONIUM BISULFITE

ASU

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Ammonium hydrogen sulfite Ammonium hydrosulfite Ammonium monosulfite		Liquid solution with water Colorless to yellow
Wear face shield or safety glasses and rubber gloves. Avoid inhalation. Stop discharge if possible. Isolate and remove discharged material. Notify local health and pollution control agencies. Protect water intakes.		Sinks and mixes with water.
Fire	Not flammable.	
Exposure	CALL FOR MEDICAL AID. Exposure data not available. Flush affected areas with plenty of water.	
Water Pollution	Effects of low concentrations on aquatic life are 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 HSO ₃ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 2693 2.5 CAS Registry No.: 10192-30-0 2.6 NAERG Guide No.: 154 2.7 Standard Industrial Trade Classification: 51481
3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Rubber gloves, face shields or safety glasses, normal protective gear. 3.2 Symptoms Following Exposure: Not pertinent 3.3 Treatment of Exposure: Call a physician. EYES: Flush with water. SKIN: Flush exposed area with water. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Currently not available 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 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: None 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: Not pertinent 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Not pertinent 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: Corrosive material 8.2 49 CFR Class: 8 8.3 49 CFR Package Group: III 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: <table border="0"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>1</td> </tr> <tr> <td>Flammability (Red).....</td> <td>0</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </table> 8.6 EPA Reportable Quantity: 5000 8.7 EPA Pollution Category: D 8.8 RCRA Waste Number: Not listed 8.9 EPA FWPCA List: Yes	Category	Classification	Health Hazard (Blue).....	1	Flammability (Red).....	0	Instability (Yellow).....	0
Category	Classification								
Health Hazard (Blue).....	1								
Flammability (Red).....	0								
Instability (Yellow).....	0								
6. WATER POLLUTION 6.1 Aquatic Toxicity: Currently not available 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): Currently not available 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: Only solid as aqueous solution. 9.2 Molecular Weight: 99.10 9.3 Boiling Point at 1 atm: Sublimates at 150°C 9.4 Freezing Point: Not pertinent 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 2.03 at room temperature (solid) 1.40 (72% aqueous solution) 9.8 Liquid Surface Tension: Currently not available 9.9 Liquid Water Interfacial Tension: Currently not available 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available 9.12 Latent Heat of Vaporization: Currently not available 9.13 Heat of Combustion: Currently not available 9.14 Heat of Decomposition: Currently not available 9.15 Heat of Solution: Endothermic 43.6 Btu/lb = 24.2 cal/g = 1.01 X 10 ⁵ J/kg (For dilute solution 1 mole/0.300 moles H ₂ O which is equal to 1.833 lb/volume lb of water) 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
50	267.000		N		N		N
55	286.610		O		O		O
60	306.221		T		T		T
65	325.832		P		P		P
70	345.443		E		E		E
75	365.056		R		R		R
80	384.667		T		T		T
85	404.278		I		I		I
90	423.889		N		N		N
95	443.500		E		E		E
100	463.110		N		N		N
105	482.721		T		T		T
110	502.332		P		P		P
115	521.943		E		E		E
120	541.556		R		R		R
125	561.167		T		T		T
130	580.778		I		I		I
135	600.389		N		N		N
140	620.000		E		E		E