



Effective Date: 01/01/13
Replaces Revision: 05/05/10

NON-EMERGENCY TELEPHONE
610-866-4225

24-HOUR CHEMTREC EMERGENCY TELEPHONE
800-424-9300

SDS – SAFETY DATA SHEET

1. Identification

Product Identifier: AMMONIUM SULFATE

Synonyms: Diammonium Sulfate, Sulfuric Acid, Diammonium Salt, Actamaster, Dolamin, Mascagnite

Chemical Formula: $(\text{NH}_4)_2\text{SO}_4$

Recommended Use of the Chemical and Restrictions On Use: Laboratory Reagent

Manufacturer / Supplier: Puritan Products; 2290 Avenue A, Bethlehem, PA 18017 **Phone:** 610-866-4225

Emergency Phone Number: 24-Hour Chemtrec Emergency Telephone 800-424-9300

2. Hazard(s) Identification

Classification of the Substance or Mixture:

Acute toxicity, Oral (Category 5)

Acute aquatic toxicity (Category 3)

Risk Phrases: Not applicable

Symbol: Not applicable

Label Elements:

Trade Name: AMMONIUM SULFATE

Signal Word: Warning



Hazard Statements:

H303: May be harmful if swallowed.

H402: Harmful to aquatic life.

Precautionary Statements:

None

3. Composition / Information on Ingredients

CAS Number: 7783-20-2
EC Number: 231-984-1
Molecular Weight: 132.14 g/mol

Ingredient	CAS Number	EC Number	Percent	Hazardous	Chemical Characterization
Ammonium Sulfate	7783-20-2	231-984-1	99 - 100%	Yes	Substance

4. First-aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give Oxygen. Get medical attention immediately.

Ingestion: DO NOT INDUCE VOMITING unless directed by a physician. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire-fighting Measures

Fire: Not considered to be a fire hazard. Flammable ammonia gas may be released in a fire.

Explosion: May explode if mixed with oxidizers, such as potassium nitrate, potassium nitrite, and potassium chlorate.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental Precautions and Methods and Materials for Containment and Cleaning Up: Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Precautions for Safe Handling and Conditions for Safe Storage, Including Any Incompatibilities: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls / Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System: A system of local and / or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, Glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

Skin Protection: Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Eye Protection: Use chemical safety goggles and / or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Fine white granules or crystals

Odor: Slight odor of ammonia

Odor Threshold: Not determined

pH: 5.5 (0.1M aqueous solution)

% Volatiles by volume @ 21C (70F): 0

Melting Point: 235 - 280C (455 - 536F) Decomposes

Boiling Point / Boiling Range: Not applicable

Flash Point: No information found

Evaporation Rate (BuAC=1): Not determined

Flammability: No information found

Upper / Lower Flammability or Explosive Limits: Not applicable

Vapor Pressure (mm Hg): No information found

Vapor Density (Air=1): No information found

Relative Density: 1.77 @ 50C(122F)

Solubility: Appreciable in water. 41.22 g/100 g water @ 25C (77F)

Partition Coefficient: n-octanol / water: No data available

Auto-ignition Temperature: log Pow: -5.1

Decomposition Temperature: No data available

Viscosity: No data available

10. Stability and Reactivity

Reactivity and / or Chemical Stability: Stable under ordinary conditions of use and storage. Maintain at temperatures below 513C (955F.)

Possibility of Hazardous Reactions and Conditions to Avoid: Excessive heat, flame, ignition sources.

Incompatible Materials: Sodium Hypochlorite, Potassium plus Ammonium Nitrate, Potassium Chlorate, Potassium Nitrite, and Sodium-Potassium powder plus Ammonium Nitrate, and other strong oxidizers.

Hazardous Decomposition Products: May emit Ammonia, oxides of Sulfur, oxides of Nitrogen, and oxides of Carbon.

11. Toxicological Information

Emergency Overview: WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED.

Potential Health Effects:

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. It presents little toxicity unless large amounts are ingested, in which case, vomiting and diarrhea are likely.

Skin Contact: Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact: Causes irritation, redness, and pain.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: No information found.

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System:) No data available.

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System:) No data available.

Numerical Measures of Toxicity: Cancer Lists: NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Ammonium Sulfate (7783-20-2)	No	No	None

Acute Toxicity:

Oral rat LD50: 2840 mg/kg

12. Ecological Information

Ecotoxicity: Harmful to aquatic life.

Persistence and Degradability: When released into water, this material is expected to readily biodegrade.

Bioaccumulative Potential: Based on high water solubility and the ionic nature, ammonium sulfate is not expected to adsorb or bioaccumulate to a significant extent.

Mobility in Soil: Based on the physicochemical properties of ammonium sulphate very high mobility in aquatic environment can be expected. Based on high water solubility, a low geo-accumulation potential and high mobility in soil is to be expected. However, due to ion-ion interactions it is to be expected that mobility in soil is significantly reduced. Ammonium sulphate will not volatilize from soil.

Other adverse effects: No information found

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

Not regulated

Maritime Transport IMDG/GGVSea

Not regulated

Air Transport ICAO-TI and IATA-DGR

Not regulated

15. Regulatory Information

Chemical Inventory Status – Part 1

Ingredient	TSCA	EC	Japan	Australia
Ammonium Sulfate (7783-20-2)	Yes	Yes	Yes	Yes

Chemical Inventory Status – Part 2

Ingredient	Korea	Canada		Phil.
		DSL	NDSL	
Ammonium Sulfate (7783-20-2)	Yes	Yes	No	Yes

Federal, State & International Regulations - Part 1

	SARA 302		SARA 313	
Ingredient	RQ	TPQ	List Chemical	Catg.
Ammonium Sulfate (7783-20-2)	No	No	No	No

Federal, State & International Regulations - Part 2

	RCRA		TSCA	
Ingredient	CERCLA	261.33	8(d)	
Ammonium Sulfate (7783-20-2)	No	No	No	
Chemical Weapons Convention: No		TSCA 12(b): No		CDTA: No
SARA 311/312:	Acute: Yes	Chronic: No	Fire: No	Pressure: No
Reactivity: Yes		Pure / Solid		

Australian Hazchem: None allocated

Poison Schedule: None allocated

16. Other Information

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