

MATERIAL SAFETY DATA SHEET

AMMONIUM MOLBDATE, LAB GRADE
CAROLINA BIOLOGICAL

Revised: 15/05/08
Replaces: 10/07/07
Printed: 20/05/08

1. PRODUCT DESCRIPTION

Product Name: Ammonium Molybdate
Product Code(s): 84-4080
Size: 100g
Chemical Name: Ammonium Heptamolybdate
CAS Number: 12054-85-2
Formula: $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24}\cdot 4\text{H}_2\text{O}$
Synonyms: Ammonium Molybdate, Tetrahydrate
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principle Hazardous Components: Ammonium Molybdate, Tetrahydrate (CAS# 12054-85-2) 100%

TLV and PEL units: ACGIH-TLV 5mg(Mo)/m³ (Soluble)
OSHA-PEL 5mg(Mo)/m³ (Soluble) 15mg(Mo)/m³ (Total Dust)

3. HAZARD IDENTIFICATION

Emergency Overview: Irritating to skin, eyes, and mucous membranes. Do not

breathe dust.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): No data available

NFPA Rating: Health: 2
Fire: 0
Reactivity: 1

Extinguisher Media:

Use media suitable to extinguish surrounding fire.

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Flammable Limits in Air % by Volume: Non-combustible
Autoignition Temperature: Non-combustible
Special Firefighting Procedures:
Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: In fire conditions may liberate ammonia and oxides of nitrogen.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store in a cool, dry place.

Other Precautions: Wash thoroughly after handling.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation. NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust: Preferred
Mechanical(General): Acceptable
Special: No
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: 1235.9

Melting Point: Decomposes at 190C

Boiling Point: Decomposes

Vapor Pressure: 0 at 20C

Vapor Density(Air=1): Unknown

Specific Gravity(H2O=1): 2.87 at 20C

Percent Volatile by Volume: Negligible as a solid

Evaporation Rate(H2O=1): Not Applicable

Solubility in Water: soluble

Appearance and Odor: Fine, colorless white or yellowish crystalline powder;

odorless or slight odor of ammonia.

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heating above 75C will cause material to decompose.

Incompatibility(Materials to Avoid): Strong oxidizers

Hazardous Decomposition Products: COx, NOx, NH3

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Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: orl-rat LD50: 333mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: No data found. Not listed as causing cancer by NTP,

IARC or

OSHA.

Conditions Aggravated by Overexposure: No data available

Target Organs: Upper respiratory tract, kidneys

Primary Route(s) of Entry: Inhalation

12. ECOLOGICAL DATA

EPA Waste Numbers: None

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable
Federal,

State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Non-regulated

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals Name Chemical List Category	CERCLA Sec. 103 RQ lbs.	RCRA Sec.
261.33				

Ammonium Molybdate No No No No No

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

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NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act