



Material Safety Data Sheet Ammonium Molybdate, 4.8%, for Phosphate

Section 1 - Chemical Product and Company Identification

MSDS Name:

Ammonium Molybdate, 4.8%, for Phosphate

Catalog Numbers:

LC11215

Synonyms:

None

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300 or
(011) 703-527-3887

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
12054-85-2	Ammonium molybdate, tetrahydrate	4.8
1336-21-6	Ammonium hydroxide	0.25

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution**Caution.** May cause eye and skin irritation. May be harmful if swallowed.**Target Organs:** None known**Potential Health Effects****Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal irritation. Adverse liver function has been reported in molybdenum workers.

Inhalation:

Inhalation of mists may cause respiratory tract irritation.



Material Safety Data Sheet Ammonium Molybdate, 4.8%, for Phosphate

Chronic:

May cause altered liver function. Anemia, blood, and kidney disorders have occurred in animals but have not been reported in humans.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion:

Get medical aid at once. Give conscious victim 2-4 cupfuls of water or milk.

Inhalation:

Move victim to fresh air. Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

CAS# 12054-85-2: Health- 2, Flammability- 0, Instability- 0.

CAS# 1336-21-6: Health- 3, Flammability- 0, Instability- 0.

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Area may be washed down with water.



Material Safety Data Sheet Ammonium Molybdate, 4.8%, for Phosphate

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not ingest or inhale. Avoid contact with eyes, skin, and clothing.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Ammonium molybdate	0.5 mg/m ³ TWA (respirable fraction, as Mo) (listed under Molybdenum soluble compounds)	1000 mg/m ³ TWA (as Mo) (listed under Molybdenum soluble compounds)	5 mg/m ³ TWA (as Mo) (listed under Molybdenum soluble compounds)
Ammonium hydroxide (as Ammonia)	25 ppm TWA; 35 ppm STEL	25 ppm TWA; 300 ppm IDLH	50 ppm TWA; 35 mg/m ³ TWA

OSHA Vacated PELs:

Ammonium molybdate: 5 mg/m³ TWA (as Mo) (listed under Molybdenum soluble compounds)

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Clear liquid
Color:	Colorless
Odor:	Slight ammonia-like
pH:	Neutral
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available



Material Safety Data Sheet

Ammonium Molybdate, 4.8%, for Phosphate

Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble.
Specific Gravity/Density:	1.05
Molecular Formula:	Not available
Molecular Weight:	Not available

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures, incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong acids.

Hazardous Decomposition Products:

Nitrogen oxides, ammonia, oxides of molybdenum.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 12054-85-2: QA4900000.

CAS# 1336-21-6: BQ9625000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 12054-85-2:

LD50 not available. Oral median lethal dose for daily repeated doses = 333 mg Mo/kg/day.

CAS# 1336-21-6:

Oral, rat: LD50 = 350 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 12054-85-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 1336-21-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

Ammonium molybdate was found to be mutagenic to bacteria.

Neurotoxicity:

No information found



Material Safety Data Sheet
Ammonium Molybdate, 4.8%, for Phosphate

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 12054-85-2 is listed on the TSCA Inventory.

CAS# 1336-21-6 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 1336-21-6: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the components are on this list.

US State

State Right to Know:

Ammonium molybdate can be found on the following state Right-to-Know lists: New Jersey.

Ammonium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Massachusetts.

California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 12054-85-2 is listed on Canada's DSL List.

CAS# 1336-21-6 is listed on Canada's DSL List.



Material Safety Data Sheet Ammonium Molybdate, 4.8%, for Phosphate

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 12054-85-2 is not listed on Canada's Ingredient Disclosure List.
CAS# 1336-21-6 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 19, 1997

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