

## Ammonium Dimolybdate

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Ammonium Dimolybdate
<b>Other Means of Identification</b>	Ammonium Polymolybdate, ADM, (NH <sub>4</sub> ) <sub>2</sub> Mo <sub>2</sub> O <sub>7</sub>
<b>Product Code(s)</b>	AM5110
<b>Product Family</b>	Inorganic Solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0916

### SECTION 2. HAZARD IDENTIFICATION

**Classification**

Not classified under any hazard class.

**Label Elements**

Not applicable

**Other Hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers
Molybdate (Mo <sub>2</sub> O <sub>7</sub> <sup>2-</sup> ), diammonium	27546-07-2	> 99	Ammonium Polymolybdate

### SECTION 4. FIRST-AID MEASURES

**First-aid Measures****Inhalation**

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing has stopped, trained personnel should begin rescue breathing. Get immediate medical advice or attention.

**Skin Contact**

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If exposed or concerned, call a Poison Centre or doctor.

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Contact physician immediately.

**Ingestion**

Immediately call a Poison Centre or doctor. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

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### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

### **Most Important Symptoms and Effects, Acute and Delayed**

None known.

### **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

#### **Unsuitable Extinguishing Media**

None known.

### **Specific Hazards Arising from the Product**

Closed containers may rupture violently when heated releasing contents. Does not burn. Heating increases the release of toxic vapour.

In a fire, the following hazardous materials may be generated: corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; molybdenum oxides.

### **Special Protective Equipment and Precautions for Fire-fighters**

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

### **Methods and Materials for Containment and Cleaning Up**

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Flush spill area. Dike and recover contaminated water for appropriate disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

### **Conditions for Safe Storage**

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container. Comply with all applicable health and safety regulations, fire and building codes.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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## Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Molybdate (Mo2O72-), diammonium	5 mg/m3		5 mg/m3			

### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Grey crystals.
Odour	Odourless
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not applicable
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	2.99
Solubility	Soluble (more than 10-50 g/100 mL) in water; Insoluble in alcohols (e.g. ethanol).
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	355 °C (671 °F)
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Solid
Molecular Weight	339.88

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

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**Possibility of Hazardous Reactions**

None known.

**Conditions to Avoid**

High temperatures. Temperatures above 200.0 °C (392.0 °F)

**Incompatible Materials**

Combustible materials.

**Hazardous Decomposition Products**

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; molybdenum oxides.

**SECTION 11. TOXICOLOGICAL INFORMATION****Likely Routes of Exposure**

Inhalation; skin contact; eye contact.

**Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Molybdate (Mo2O72-), diammonium	Not available	Not available	Not available

**Skin Corrosion/Irritation**

May cause skin irritation.

**Serious Eye Damage/Irritation**

May cause eye irritation.

**STOT (Specific Target Organ Toxicity) - Single Exposure****Inhalation**

May cause severe nose and throat irritation.

**Ingestion**

Toxic, can cause death.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

If inhaled: lung injury. Following skin contact: may cause dermatitis. Symptoms may include dry, red, cracked skin.

**Respiratory and/or Skin Sensitization**

No information was located.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Molybdate (Mo2O72-), diammonium	Not Listed	Not designated	Not Listed	Not Listed

## Reproductive Toxicity

### Development of Offspring

No information was located.

### Sexual Function and Fertility

No information was located.

### Effects on or via Lactation

No information was located.

## Germ Cell Mutagenicity

No information was located.

## Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

**Special Precautions** Not applicable

### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

##### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

#### USA

##### Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

**Date of Preparation** February 16, 2017

**Date of Last Revision** March 21, 2017

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or

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reliance on any information herein.