

Centre Anti-Poison pour le Québec: (800) 463-5060 Tél. (Qc): (418) 660-8666 / 800-890-8666 Fax. (Qc): (418) 660-8998

#### SAFETY DATA SHEET

### **SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier		Product Use			
AMMONIUM MOLYBDATE TETRAHYDRATE			Laboratory use		
Chemical formula				Product code	Molar weight
(NH <sub>4</sub> )Mo <sub>7</sub> O <sub>24</sub> .4H <sub>2</sub> O			AR-0141	1235,86	
Chemical name / Commercial name / Synonymous  AMMONIUM MOLYBDATE (VI) TETRAHYDRATE, AMMONIUM MOLYBDATE 4-HYDRA  AMMONIUM PARAMOLYBDATE, DIAMMONIUM MOLYBDATE, MOLYBDIC ACID DIA			·	E TETRAHYDRATE,	
Supplier's name		Address-Street			
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Internet		Phone number		
G1C 7B7	C 7B7 www.labmat.com		418-660-8666 / 800-890-8666		
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-PO	POISON DU QUÉBEC 800-463-5060	
Date SDS	SDS Prepared by			E-Mail	
4/12/2019 Laboratoire MAT		T	labmat@labmat.com		

### **SECTION 02 - HAZARDS IDENTIFICATION**

Classification WHIMS / GHS	Not a hazardou	is substance according to WHMIS 2015
Other dangers		NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health Fire Reactivity Special danger	

## **SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS**

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Molybdate d'ammonium (tétrahydrate)	12054-85-2	<=100%

#### **SECTION 04 - FIRST AID MEASURES**

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

### **SECTION 05 - FIREFIGHTING MEASURES**

Flammability	No
Ignition conditions	Non flammable.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion / decomposition products	When heated to decomposition, ammonium molybdate releases toxic vapors of ammonia and nitrogen oxides. Molybdene oxides.
	Keep product and empty containers away from heat and sources of ignition. May react violently with incompatible products (Ref Section 10).
	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

### **SECTION 06 - ACCIDENTAL RELEASE MEASURES**

	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Clean and rinse with water. Dispose of residues
	in a container provided for the disposal of hazardous materials. Do not let product enter drains.
equipment	· · · · · · · · · · · · · · · · · · ·

### **SECTION 07 - HANDLING AND STORAGE**

	Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed and store away from heat, moisture, and incompatible products.
•	Always open containers slowly to allow any excess pressure to vent. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

# **SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Workplace control parameters

Data source	Sigma-Aldrich.
Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

### **SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	Solid.
Appearance	Poudre cristalline de couleur blanche légèrement teintée de vert ou de jaune
Odour	inodore.
Odour threshold	Data not available
рН	5,1 solution aqueuse à 1,0%.
Melting point / Freezing point	190°C
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Vapour density	2.5-
Relative density	2.498g/cm <sup>3</sup>
Solubility	Soluble dans l'eau. Hydrosolubilité: 4.3 g/l à 20 °C. Insoluble dans l'alcool
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	> 150°C
Viscosity	Data not available

### **SECTION 10 - STABILITY AND REACTIVITY**

Reactivity	Non-reactive under normal conditions.	
Chemical stability	Stable under recommended storage conditions.	
Possibility of hazardous reactions	Stable under normal conditions.	
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat and humidity. Avoid dust formation. Incompatible products.	
Incompatible material	Oxidizing agents and strong acids, heat and humidity.	
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NOx), Molybdenum oxides	

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

#### AMMONIUM MOLYBDATE TETRAHYDRATE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	Irritation.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, cough, dyspnea, headache, dizziness, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, nervous disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, tiredness, loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 333 mg $/$ kg LD50 Dermal - Rabbit - $>$ 2,000 mg $/$ kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4 h - 5 mg / I

#### **SECTION 12 - ECOLOGICAL INFORMATION**

	Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 320 mg / I - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 420 mg / I - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Great Daphnia) - 140 mg / I - 48 h Toxicity to algae: EC50 - Desmodesmus subspicatus (green algae) - 41 mg / I - 72 h
Persistence and degradability	Soluble in water Persistence is unlikely based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Avoid release to the environment.

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

#### **SECTION 14 - TRANSPORT INFORMATION**

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

#### **SECTION 15 - REGULATORY INFORMATION**

WHIMS CANADA	Not a hazardous substance according to WHMIS 2015

#### **SECTION 16 - OTHER INFORMATION**

#### **Further information**

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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