



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 AMMONIUM CHLORIDE		Product Use Laboratory use	
Chemical formula NH <sub>4</sub> Cl		Product code AP-0130	Molar weight 53,49
Chemical name / Commercial name / Synonymous AMMONIUM CHLORIDE, MURIATE D'AMMONIUM, SAL AMMONIA, SAL AMMONIAC, SALMIAC, AMCHLOR, DARAMMON			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 12/4/2018	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Oral category 4 Serious eye damage/ Eye irritation category 2A
Signal Word	WARNING
Hazards statements (H)	H302 Harmful if swallowed. H319 Causes serious eye irritation.
Precautionary statements (P)	P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330 Rinse mouth. P337 + P313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 0 Reactivity 0 Special danger

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorure d'ammonium	12125-02-9	<=100

## SECTION 04 - FIRST AID MEASURES

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

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NO <sub>x</sub> ). Hydrogen chloride gas. Ammonia.
<b>Special fire and explosion hazards</b>	Ammonium chloride forms an explosive mixture in the presence of potassium chlorate. Violent reactions (ignition) on contact with trifluoride and bromine pentafluoride. Ammonium chloride combined with hydrogen cyanide produces a very unstable compound; nitrogen trichloride. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personnel precautions, protective equipment</b>	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. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Hygroscopic. 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.
<b>Methods of handling</b>	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 or vapor is formed.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Ammonium chloride	12125-02-9	TWA	10.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
		STEL	20.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
		TWA	10.000000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		STEL	20.000000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		TWA	10.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
		STEL	20.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
		TWAEV	10.000000 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	20.000000 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	10.000000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		STEL	20.000000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
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		TWAEV	10.000000 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	20.000000 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	10.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		STEL	20.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		TWA	10.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		STEL	20.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat.
<b>Engineering control</b>	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-
Odour	Faible odeur d'ammoniac..
Odour threshold	Data not available
pH	4.5 -5.5 à 50 g/l à 20.0°C.
Melting point / Freezing point	340°C
Initial boiling point	520°C
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	1.3 hPa (1.0 mmHg) à 160.4 °C-
Vapour density	Data not available
Relative density	1.527g/cm <sup>3</sup>
Solubility	Soluble dans l'eau (26% à 15°C). Soluble dans l'alcool et la glycérine..
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	350°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)	This product quickly absorbs moisture from the air.
Incompatible material	Strong acids and bases, trifluoride and bromine pentafluoride, hydrogen cyanide, alkali metals and their carbonates, lead and silver salts, potassium chlorate and moisture. Strong acids, Strong bases, Strong oxidizers.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas Nitrogen oxides. Ammonia.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### AMMONIUM CHLORIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- 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, dermatitis, conjunctivitis, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, confusion, irritability, tiredness, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1 650 mg/kg LD50 Dermal - Rat - > 2 000 mg/kg.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxicity to fish: LC50 - Cyprinus carpio (carp) - 209.00 mg / l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 3.98 mg / l - 96 h NOEC - Oncorhynchus mykiss (rainbow trout) - 57 mg / l - 96 h Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna (Greater Daphnia) - 161 mg / l - 48 h Inhibition of growth NOEC - Daphnia magna (Greater Daphnia) - 0.1 mg / l - 216 h
<b>Persistence and degradability</b>	Soluble in water. Persistence is unlikely based on the information provided.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Soluble in water. Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

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

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	Acute toxicity - Oral category 4  Serious eye damage/ Eye irritation category 2A
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## 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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