




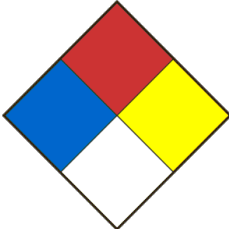
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|--|------------------------------------|---|-----------------------|
| Product Identifier AMMONIUM CHLORIDE | | Product Use Laboratory use | |
| Chemical formula NH ₄ 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 10/13/2022 | 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=Significant; 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

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| 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, drink water and induce vomiting. 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

| | |
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| Flammability | No |
| Ignition conditions | Not flammable or combustible. |
| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | Data not available. |
| Hazardous combustion products | Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NO _x). Hydrogen chloride gas. Ammonia. |
| Special fire and explosion hazards | 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). |
| Special protective equipment and precautions for firefighters | 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

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| Methods and materials for containment and cleaning up / Personnel precautions, protective equipment | 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. |
|--|--|

SECTION 07 - HANDLING AND STORAGE

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| Conditions for safe storage | 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. |
| Methods of handling | 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 ³ | Canada. British Columbia OEL |
| | | STEL | 20.000000 mg/m ³ | Canada. British Columbia OEL |
| | | TWA | 10.000000 mg/m ³ | 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 ³ | 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 ³ | Canada. British Columbia OEL |
| | | STEL | 20.000000 mg/m ³ | Canada. British Columbia OEL |
| | | TWAEV | 10.000000 mg/m ³ | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| | | STEV | 20.000000 mg/m ³ | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| | | TWA | 10.000000 mg/m ³ | 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 ³ | 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 | | | |
| | | TWAEV | 10.000000 mg/m ³ | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| | | STEV | 20.000000 mg/m ³ | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| | | TWA | 10.000000 mg/m ³ | USA. ACGIH Threshold Limit Values (TLV) |
| | | STEL | 20.000000 mg/m ³ | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 10.000000 mg/m ³ | USA. ACGIH Threshold Limit Values (TLV) |
| | | STEL | 20.000000 mg/m ³ | USA. ACGIH Threshold Limit Values (TLV) |

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|----------------------------|--|
| Data source | Sigma-Aldrich. |
| Ventilation | Use 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

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| Physical state | Solid. |
| Appearance | Poudre cristalline de couleur blanche à beige- |
| Odour | Faible odeur d'ammoniac.. |
| Odour threshold | Data not available |
| pH | 4.5 -6 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 ³ |
| 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

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|---|--|
| 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

| | |
|--------------------------------------|---|
| Ecotoxicity | 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 |
| Persistence and degradability | Soluble in water. Persistence is unlikely based on the information provided. |
| Bioaccumulative potential | Data not available. |
| Mobility in soil | Soluble in water. Probable mobility in the environment due to its solubility in water. |
| Other adverse effects | 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

| | |
|-------------------------------|--|
| Waste Disposal Method | 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 | Acute toxicity - Oral category 4 Serious eye damage/ Eye irritation category 2A |
|---------------------|--|

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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