



Centre Anti-Poison pour le Québec: (800) 463-5060

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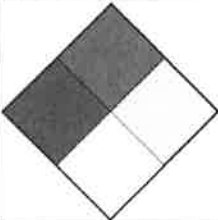
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

|                                                                                                                                                                                                   |                                                                        |                                                    |                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------|------------------------------|
| Product Identifier<br><b>POTASSIUM THIOCYANATE</b>                                                                                                                                                |                                                                        | Product Use<br><b>Laboratory use</b>               |                              |
| Chemical formula<br><b>KSCN</b>                                                                                                                                                                   |                                                                        | Product code<br><b>PR-0212</b>                     | Molar weight<br><b>97,18</b> |
| Chemical name / Commercial name / Synonyms<br><b>POTASSIUM THIOCYANATE, ISOTHIOCYANATE DE POTASSIUM, SULFOCYANATE DE POTASSIUM, POTASSIUM RHODANIDE, POTASSIUM THIOCYANIDE, RHOCYA, RHODANIDE</b> |                                                                        |                                                    |                              |
| Supplier's name<br><b>Laboratoire MAT</b>                                                                                                                                                         |                                                                        | Address-Street<br><b>610, Adanac Street</b>        |                              |
| City<br><b>Québec</b>                                                                                                                                                                             |                                                                        | Province<br><b>Québec</b>                          |                              |
| Postal code<br><b>G1C 7B7</b>                                                                                                                                                                     | Internet<br><b>www.labmat.com</b>                                      | Phone number<br><b>418-660-8666 / 800-890-8666</b> |                              |
| Emergency phone                                                                                                                                                                                   | <b>CANUTEC: 613-996-6666 CENTRE ANTI-POISON DU QUÉBEC 800-463-5060</b> |                                                    |                              |
| Date SDS<br><b>10/1/2018</b>                                                                                                                                                                      | SDS Prepared by<br><b>Laboratoire MAT</b>                              | E-Mail<br><b>labmat@labmat.com</b>                 |                              |

## SECTION 02 - HAZARDS IDENTIFICATION

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classification WHIMS / GHS</b>                                                   | Acute toxicity - Oral category 4<br>Acute toxicity - Inhalation category 4<br>Acute toxicity - Dermal category 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Signal Word</b>                                                                  | WARNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Hazards statements (H)</b>                                                       | H302 Harmful if swallowed.<br>H312 Harmful in contact with skin.<br>H332 Harmful if inhaled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Precautionary statements (P)</b>                                                 | P261 Avoid breathing dust / fume / gas / mist / vapours / spray.<br>P264 Wash the areas of the body that have been in contact with the product after handling.<br>P270 Do not eat, drink or smoke when using this product.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.<br>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>P312 Call a POISON CENTER or doctor/physician if you feel unwell.<br>P321 Specific treatment (see section 4 of the SDS and on this label).<br>P330 Rinse mouth.<br>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.<br>P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.<br>P362 + P364 Take off contaminated clothing and wash it before reuse. |
| <b>PICTOGRAMS</b>                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other dangers</b>                                                                | NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|  | <b>Health</b> 1<br><b>Fire</b> 0<br><b>Reactivity</b> 0<br><b>Special danger</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingrédients (Dénomination chimique / synonymes) | Numéro CAS et tout identificateur unique | Concentration (%) |
|-------------------------------------------------|------------------------------------------|-------------------|
| Thiocyanate de potassium                        | 333-20-0                                 | ≤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>                                                      | If breathing is difficult, give oxygen. If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  |
| <b>Ingestion</b>                                                       | If the person is conscious, give water to drink. 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>                                  | Dry powder.                                                                                                                                                                                                                                               |
| <b>Unsuitable extinguishing media</b>                                | Not applicable.                                                                                                                                                                                                                                           |
| <b>Dangerous fumes - combustion</b>                                  | When heated to decomposition, the product emits toxic fumes: Oxides of carbon, oxides of nitrogen (NO <sub>x</sub> ) Potassium oxides.                                                                                                                    |
| <b>Hazardous combustion / decomposition products</b>                 | Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Sulphur oxides, Potassium oxides                                                                                                      |
| <b>Special fire and explosion hazards</b>                            | Mixing potassium thiocyanate with sodium nitrite can cause an explosion, especially if heated above 270 ° C. The same goes for potassium nitrite when heated to over 370 ° C. 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 / Personal 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. |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 07 - HANDLING AND STORAGE

|                                    |                                                                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conditions for safe storage</b> | Keep container tightly closed in a dry and well-ventilated place. Air, light, and moisture sensitive. Protect from sunlight and light. Keep container tightly closed and store away from heat, water, 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                                                                                                                                   |
|-----------------------|---------------------|-------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Potassium thiocyanate | 333-20-0            | STEL  | 10 ppm<br>11 mg/m <sup>3</sup> | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| Remarks               | Skin (percutaneous) |       |                                |                                                                                                                                         |

|                            |                                                                                                                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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                            | Granules cristallines de couleur blanche.- |
| Odour                                 | Donnée non disponible.                     |
| Odour threshold                       | Data not available                         |
| pH                                    | 4.8 @ 20.1 °C and 1 070 g/L.               |
| Melting point / Freezing point        | 173-177°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                        | Data not available                         |
| Relative density                      | 1.90g/cm <sup>3</sup>                      |
| Solubility                            | Soluble dans l'eau, l'alcool et l'acétone. |
| Partition coefficient water/n-octanol | Data not available                         |
| Auto-ignition temperature             | Data not available                         |
| Decomposition temperature             | Data not available                         |
| 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 moisture.                                                                                                                         |
| Conditions of instability (Including sensitivity to shock / static discharge / vibration) | This product may decompose if exposed to moisture from the air or water. May discolor if exposed to light.                              |
| Incompatible material                                                                     | Strong acids, calcium chlorite, perchloryl fluoride, potassium nitrite, sodium nitrite, water, moisture and light. Strong bases.        |
| Hazardous decomposition products                                                          | Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Potassium oxides |

## SECTION 11 - TOXICOLOGICAL INFORMATION

### POTASSIUM THIOCYANATE

|                                           |                                                                                                                                                                                                                                                    |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Routes of exposure                        | Ingestion, inhalation, skin and eyes.                                                                                                                                                                                                              |
| Acute exposition effects / symptoms:      | By exposure route below.                                                                                                                                                                                                                           |
| - Eyes                                    | Irritation and tearing.                                                                                                                                                                                                                            |
| - 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. Ingestion of high doses may result in a psychotic state with rash, hypotension and loss of consciousness. |
| Chronic exposure effects / symptoms       | Burning sensation, dermatitis, nervous disorders, cough, dyspnea, headache, dizziness, confusion, irritability, tiredness, nausea and vomiting.                                                                                                    |
| DL50 (specify species and route of entry) | LD50 Oral - Rat - 854 mg/kg. LD50 Dermal - Rabbit - 2000 mg/kg                                                                                                                                                                                     |
| CL50 (specify species and route of entry) | Data not available.                                                                                                                                                                                                                                |

## SECTION 12 - ECOLOGICAL INFORMATION

|                                      |                                                                                                                                                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>                   | Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96.0 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 11 mg/l - 48 h |
| <b>Persistence and degradability</b> | Data not available.                                                                                                                                                                        |
| <b>Bioaccumulative potential</b>     | Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 16 Weeks Bioconcentration factor (BCF): 13,4.                                                                                        |
| <b>Mobility in soil</b>              | Data not available.                                                                                                                                                                        |
| <b>Other adverse effects</b>         | Harmful to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.                                         |

## 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<br>Acute toxicity - Inhalation category 4<br>Acute toxicity - Dermal category 4 |
|---------------------|------------------------------------------------------------------------------------------------------------------|

## 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.

Last Update: 10/1/2018