

MATERIAL SAFETY DATA SHEET**LANTHANUM CHLORIDE**

PRODUCT CODE NUMBER(S): 4290-1

PRODUCT IDENTIFICATION**Chemical Name and Synonyms:** *Lanthanum chloride, hydrated***Chemical Family:** *Inorganic salt***Chemical Formula:** *LaCl₃.7H₂O***Product Use:** *Laboratory reagent***Manufacturer's Name and Address:***Caledon Laboratories Ltd.**40 Armstrong Avenue**Georgetown, Ontario L7G 4R9***Telephone No:** *(905) 877-0101***Fax No:** *(905) 877-6666***Emergency Telephone No:** *CANUTEC (613) 996-6666***HAZARDOUS INGREDIENTS OF MATERIALS**

| <i>Ingredients</i> | <i>%</i> | <i>TLV Units</i> | <i>CAS No.</i> |
|---------------------------|---------------|---------------------------------|-------------------|
| <i>Lanthanum chloride</i> | <i>>95</i> | <i>(TWA) 5 mg/m³</i> | <i>10025-84-0</i> |

PHYSICAL DATA**Physical State:** *Solid***Odour and Appearance:** *White crystalline powder or chunks, odourless***Odour Threshold (ppm):** *Not applicable***Vapour Pressure (mm Hg):** *Not available***Vapour Density (Air = 1):** *Not available***Evaporation Rate:** *Not available***Boiling Point (degrees C):** *Not available***Melting Point (degrees C):** *872°C (loses water at 90°C)***pH:** *Not available***Specific Gravity:** *3.842***Coefficient of Water/Oil distribution:** *Not available***SHIPPING DESCRIPTION****UN:** *Not regulated***T.D.G. Class:** *Not regulated***Pkg. Group:** *Not regulated***REACTIVITY DATA****Chemical Stability:** *Stable under normal temperatures and pressures.***Incompatibility with other substances:** *May react violently or explosively with strong oxidizers, strong acids, strong bases.***Reactivity:** *Avoid excessive heat, generation of dust, incompatible materials.***Hazardous Decomposition Products:** *Toxic fumes of chlorine compounds.***FIRE AND EXPLOSION DATA****Flammability:** *Not combustible***Extinguishing Media:** *Use an extinguisher appropriate to the surrounding material which is burning. Use water as spray or fog to minimize dust, absorb heat, cool containers, and disperse vapours. Fight fire from upwind, from a safe distance. Firefighters should wear protective equipment, full face-piece positive-pressure self-contained breathing apparatus, and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes.***Flash Point (Method Used):** *Not applicable***Autoignition Temperature:** *Not applicable***Upper Flammable Limit (% by volume):** *Not applicable***Lower Flammable Limit (% by volume):** *Not applicable***Hazardous Combustion Products:** *Hydrogen chloride gas, toxic and irritating fumes***Sensitivity to Impact:** *None identified***Sensitivity to Static discharge:** *None identified***TOXICOLOGICAL PROPERTIES AND HEALTH DATA****Toxicological Data:****LD₅₀:** *(oral, rat) 4,184 mg/kg***LC₅₀:** *Not available***Effects of Acute Exposure to Product:****Inhaled:** *May be irritating to upper respiratory tract, causing coughing and sneezing. Not expected to be harmful.***In contact with skin:** *No human or animal information available. May be irritating, causing redness, itching, pain.***In contact with eyes:** *May be mildly irritating to eyes.***Ingested:** *May be irritating to gastrointestinal tract, causing nausea, abdominal pain, vomiting. Large doses may be harmful.***Effects of Chronic Exposure to Product:****Carcinogenicity:** *Not listed as carcinogenic by NTP, IARC, OSHA.***Teratogenicity:** *No information available***Reproductive Effects:** *Insufficient information available***Mutagenicity:** *No information available***Synergistic Products:** *None known***PREVENTIVE MEASURES****Engineering Controls:** *Local exhaust ventilation recommended.***Respiratory Protection:** *Dust mask. NIOSH approved respirator for dusty conditions. For higher or unknown concentrations, as in fire or spill conditions, positive-pressure, full face-piece self-contained breathing apparatus.***Eye Protection:** *Chemical safety glasses*

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Skin Protection: Rubber or plastic gloves. Plastic apron, long sleeves, other clothing sufficient to prevent contact.

Other Personal Protective Equipment: Safety shower and eye-wash fountain in work area.

Leak and Spill Procedure: Ventilate area of spill. Clean-up personnel must be thoroughly trained in the handling of hazardous materials, and must wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes. Gather up in a manner that does not generate dust, and collect in suitable containers for reclamation or disposal.

Waste Disposal: Follow all federal, provincial and local regulations for disposal.

Handling Procedures and Equipment: Workers must be thoroughly trained in the hazards of this substance and its safe use. Use routine safe handling procedures. Use the smallest amount possible for the purpose. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Use with adequate ventilation. Wash thoroughly after handling.

Storage Requirements: Store in suitable, labelled containers, in a cool, dry, well-ventilated area, out of direct sunlight. Keep containers tightly closed when not in use and when empty. Protect from damage. Store away from incompatible materials.

ance thereon. Such information is solely for your consideration, investigation, and verification.

FIRST AID MEASURES

Specific Measures:

Eyes: Flush eyes thoroughly with gently running water, holding eyelids open while flushing, for five to ten (5-10) minutes, or until no trace of chemical remains. Get medical advice if irritation develops.

Skin: Remove contaminated clothing. Brush or wipe off dry material. Flush skin with plenty of running water until no evidence of chemical remains. If irritation develops get medical attention.

Inhalation: Remove to fresh air. Give oxygen and get medical attention for any breathing difficulty.

Ingestion: If the victim is alert and not convulsing, rinse mouth thoroughly with water and give 2 to 4 glasses of water to drink to dilute. If victim feels unwell, or if a large amount has been ingested, get medical attention.

REFERENCES USED

Sax, Lewis: *Hawley's Condensed Chemical Dictionary*, 11th ed., 1987

Sax: *Dangerous Properties of Industrial Materials*, 5th ed., 1979

Suppliers' Material Safety Data Sheets

ADDITIONAL INFORMATION

Date Issued: November 25, 1991

Revision: October 2010

MSDS: 4290-1

Proposed WHMIS Designation: Not controlled. Not required to be updated every three years (WHMIS 1992, B-40, Section 29,2)

Prepared by: Caledon Laboratories Ltd. (905) 877-0101
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