

MATERIAL SAFETY DATA SHEET**1-PENTANESULPHONATE, SODIUM SALT**

PRODUCT CODE NUMBER(S): 7810-5

PRODUCT IDENTIFICATION**Chemical Name and Synonyms:** 1-Pentanesulphonate, sodium salt; 1-Pentanesulphonic acid, sodium salt**Chemical Family:** Ion pair reagent**Chemical Formula:** $\text{CH}_3(\text{CH}_2)_4\text{SO}_3\text{Na}$ **Product Use:** Laboratory chemical**Manufacturer's Name and Address:**

Caledon Laboratories Ltd.

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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**

Ingredients	%	TLV Units	CAS No.
1-Pentanesulphonate sodium	>98	Not available	22767-49-3

PHYSICAL DATA**Physical State:** Solid**Odour and Appearance:** Colourless to white flakes or powder, odourless.**Odour Threshold (ppm):** Not applicable**Vapour Pressure (mm Hg):** Not available**Vapour Density (Air = 1):** Not available**Evaporation Rate:** Not available**Boiling Point (°C):** Not applicable**Melting Point (°C):** >300°C**pH:** 1.2 (aqueous solution)**Specific Gravity:** Not available**Coefficient of Water/Oil distribution:** Not available**Solubility in Water:** Moderate**SHIPPING DESCRIPTION****UN:** Not regulated**T.D.G. Class:** Not regulated**Pkg. Group:** Not regulated**REACTIVITY DATA****Chemical Stability:** Stable**Incompatibility with other substances:** Generally sulphonates are incompatible with strong acids.**Reactivity:** Avoid contact with strong acids or acid fumes, generation of dust, excessive heat or ignition sources.**Hazardous Decomposition Products:** SO_x , CO_x when heated to decomposition, or in contact with acid or acid fumes.**FIRE AND EXPLOSION DATA****Flammability:** Combustible if strongly heated. As with most organic compounds, fine dust dispersed in air in the presence of an ignition source is a potential dust explosion hazard.**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:** Toxic fumes of SO_x , CO_x **Sensitivity to Impact:** None identified**Sensitivity to Static discharge:** As with most organic powders, mixtures of dust with air may be sensitive under certain conditions, when ignited by an electrostatic or other high-voltage spark, or other ignition source.**TOXICOLOGICAL PROPERTIES AND HEALTH DATA**

To the best of our knowledge, the physical, chemical and toxicological properties of this substance have not yet been thoroughly investigated.

Toxicological Data:**LD₅₀:** Not available**LC₅₀:** Not available**Effects of Acute Exposure to Product:****Inhaled:** No human or animal information available. Dust or mist may be irritating. May cause coughing, dry throat, difficult breathing, nasal congestion, headache. Sulphonates may cause allergic reaction.**In contact with skin:** Sulphonates are generally irritants. Prolonged contact may cause dermatitis.**In contact with eyes:** May cause mild irritation to eyes.**Ingested:** No information available. Will probably cause gastro-intestinal irritation, with nausea and vomiting, abdominal pain. May be harmful.**Effects of Chronic Exposure to Product:****Carcinogenicity:** No information available**Teratogenicity:** No information available**Reproductive Effects:** No information available**Mutagenicity:** No information available**Synergistic Products:** None known

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PREVENTIVE MEASURES

Engineering Controls: Use local exhaust ventilation.

Respiratory Protection: Dust mask. NIOSH approved half-face dust/mist respirator for dusty conditions. Positive-pressure, full face-piece self-contained breathing apparatus for high or unknown concentrations, as in fire or spill conditions.

Eye Protection: Safety glasses

Skin Protection: Rubber or plastic gloves. Other protective body-covering clothing sufficient to prevent contact.

Other Personal Protective Equipment: Safety shower and eyewash fountain in work area.

Leak and Spill Procedure: Ventilate area. Evacuate area, and eliminate all sources of ignition. Cleanup personnel should be trained in the hazards of the material and its safe handling, and should wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes. Do not touch spilled material. Gather up in a manner that does not raise dust; wet if necessary. Contain spill with inert absorbent, collect, and transfer carefully to containers for recovery or disposal. Flush area of spill thoroughly with running water.

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

Handling Procedures and Equipment: COMBUSTIBLE DUST. Workers using this chemical must be properly trained in its hazards and its safe use. Avoid generating dust. If there is dust, keep away from heat, sparks, and all sources of ignition; avoid the accumulation of static charge, use anti-sparking tools and ground and bond equipment and containers. Use the smallest amount possible for the purpose, in a designated area with adequate ventilation. Use good housekeeping to prevent accumulations of dust. Avoid contact with skin and eyes. Avoid inhalation. Wash thoroughly after handling.

Storage Requirements: Store in suitable, labelled containers in a cool, dry, well-ventilated area, out of direct sunlight and away from incompatible or combustible materials. Keep air out of container. Keep container tightly closed. Inspect frequently for signs of damage or leaking. Treat empty containers with caution; they may contain hazardous residues.

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. Wash 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

Budavari: *The Merck Index*, 12th ed., 1997

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

Suppliers' Material Safety Data Sheets

ADDITIONAL INFORMATION

Date Issued: March 10, 1989

Revision: October 2010

MSDS: 7810-5

Proposed WHMIS Designation: Insufficient information available

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