

MATERIAL SAFETY DATA SHEET**TETRAETHYLAMMONIUM BROMIDE**

PRODUCT CODE NUMBER(S): 8780-5

PRODUCT IDENTIFICATION**Chemical Name and Synonyms:** *Tetraethylammonium bromide***Chemical Family:** *Ammonium compound***Chemical Formula:** $C_6H_{20}BrN$ **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>Tetraethylammonium bromide</i>	<i>98</i>	<i>Not established</i>	<i>71-91-0</i>

PHYSICAL DATA**Physical State:** *Solid***Odour and Appearance:** *White to light yellow crystalline powder, odourless***Odour Threshold (ppm):** *Not applicable***Vapour Pressure (mm Hg):** *0 @ 20°C***Vapour Density (Air = 1):** *5.3***Evaporation Rate:** *Negligible***Boiling Point (degrees C):** *Decomposes***Melting Point (degrees C):** *286°C***pH:** *Not available***Specific Gravity:** *1.40***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 conditions of use and storage; hygroscopic.***Incompatibility with other substances:** *May react vigorously or violently with strong oxidizing agents, strong bases.***Reactivity:** *Avoid excessive heat, ignition sources, generation of dust, all incompatible materials.***Hazardous Decomposition Products:** CO_x , NO_x , HBr, hydrogen cyanide gases**FIRE AND EXPLOSION DATA****Flammability:** *May be 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 that is burning. Water spray can be used to cool containers, prevent dust formation, flush chemical away from fire. Fight fire from upwind, from a safe distance. Firefighters must wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes.***Flash Point (Method Used):** *Not available***Autoignition Temperature:** *Not available***Upper Flammable Limit (% by volume):** *Not available***Lower Flammable Limit (% by volume):** *Not available***Hazardous Combustion Products:** CO_x , NO_x , HBr, hydrogen cyanide gases**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:** *(oral, mouse) >2 gm/kg***LC₅₀:** *Not available***Effects of Acute Exposure to Product:****Inhaled:** *Dust or mist may be irritating to upper respiratory tract, causing coughing, sneezing, nasal discharge. No information available on toxicity. Inhalation of large amounts may be harmful.***In contact with skin:** *Dust or solutions may be mildly irritating to skin, causing redness and itching. May aggravate previously damaged skin and delay healing.***In contact with eyes:** *Dust or solutions may cause temporary irritation to eye tissue.***Ingested:** *May be irritating to gastrointestinal tract, causing nausea, vomiting, abdominal pain and diarrhea. Ingestion of large amounts 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*

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Synergistic Products: None found*comfort occurs, or if a large amount has been ingested, get medical attention.***PREVENTIVE MEASURES****Engineering Controls:** Local exhaust required.**Respiratory Protection:** Dust/mist mask. For conditions where dust or mist is present, to the maximum use specified by the respirator supplier, NIOSH/OSHA approved half-face high-efficiency dust/mist filter respirator, or NIOSH/OSHA approved full face-piece high-efficiency dust/mist filter respirator. Higher or unknown concentrations, or for fire or spill conditions, self-contained breathing apparatus, or full face-piece, positive-pressure supplied-air respirator.**Eye Protection:** Chemical safety glasses. Do not wear contact lenses when working with chemicals.**Skin Protection:** Wear protective gloves and clean body-covering clothing, long-sleeved shirt, trousers, apron or lab coat.**Other Personal Protective Equipment:** Safety shower and eye-wash fountain in work area.**Leak and Spill Procedure:** Evacuate area, provide maximum ventilation and shut off all sources of ignition. Clean up personnel must be thoroughly trained in the handling of hazardous materials, and must wear protective equipment and clothing sufficient to prevent inhalation and contact with skin, eyes and clothing. Contain spill and collect carefully using absorbent material. Prevent from entering sewers or waterways. Collect contaminated adsorbent for disposal. Contaminated materials may pose the same hazards as the chemical, treat with caution. After cleanup is done, flush area of spill thoroughly with copious amounts of running water.**Waste Disposal:** Follow all federal, provincial and local regulations for disposal.**Handling Procedures and Equipment:** IRRITANT, COMBUSTIBLE as DUST. Workers using this chemical must be properly trained in its hazards and its safe use, and must wear appropriate protective equipment and clothing. 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. Handle with extreme care. Use the smallest amount possible for the purpose, in a designated area with adequate ventilation. Use good housekeeping to prevent accumulations of dust. Avoid all contact and inhalation. Wash thoroughly after handling.**Storage Requirements:** Store in suitable, labelled containers, in a cool, dry, well ventilated area, away from all ignition sources and incompatible materials. Keep containers tightly closed when not in use and when empty. Protect from damage.**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 victim is alert and NOT convulsing, rinse mouth, give several glasses of water to drink to dilute. If dis-**REFERENCES USED**

CCINFO disc:

Sax, Lewis: *Hawley's Condensed Chemical Dictionary*, 11th ed., 1987Sax: *Dangerous Properties of Industrial Materials*, 5th ed., 1979

Suppliers' Material Safety Data Sheets

ADDITIONAL INFORMATION**Date Issued:** July 7, 1999**Revision:** June 2011**MSDS:** 8780-5**Proposed WHMIS Designation:** D2B (irr)

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