

**MATERIAL SAFETY DATA SHEET****CALCIUM SULPHATE**

PRODUCT CODE NUMBER(S): 2720-1

**PRODUCT IDENTIFICATION****Chemical Name and Synonyms:** *Calcium sulphate, dihydrate; Gypsum; Plaster of Paris***Chemical Family:** *Inorganic salt***Chemical Formula:** *CaSO<sub>4</sub>·2H<sub>2</sub>O***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>Calcium sulphate</i>	<i>98</i>	<i>5 mg/m<sup>3</sup></i> <i>(respirable fraction)</i>	<i>10101-41-4</i>

**PHYSICAL DATA****Physical State:** *Solid***Odour and Appearance:** *White, odourless powder or crystals***Odour Threshold (ppm):** *Odourless***Vapour Pressure (mm Hg):** *Not applicable***Vapour Density (Air = 1):** *Not applicable***Evaporation Rate:** *Not applicable***Boiling Point (degrees C):** *Not available***Melting Point (degrees C):** *128°C (loses some water, becomes hemi-hydrate; 163°C (loses remaining water) 1360°C (anhydrous form decomposes)***pH:** *6-7.6 (20% suspension in water)***Specific Gravity:** *2.960***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. Reacts non-hazardously with water to form Plaster of Paris and gypsum.***Incompatibility with other substances:** *Stable; non-reactive under normal conditions. Hazardous reactions may occur with some highly reactive materials, or at high temperatures. Aluminum causes reduction of calcium sulphate at high temperature causing a violent explosion. Contact with diazomethane vapour generates heat which can lead to detonation. Not corrosive.***Reactivity:** *Avoid excessive heat, generation of dust, incompatible materials.***Hazardous Decomposition Products:** *None identified***FIRE AND EXPLOSION DATA****Flammability:** *Not combustible. Will not burn.***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:** *Oxides of sulphur***Sensitivity to Impact:** *None identified***Sensitivity to Static discharge:** *None identified***TOXICOLOGICAL PROPERTIES AND HEALTH DATA****Toxicological Data:***Has not been tested in animals due to accumulated evidence of non-toxicity.***LD<sub>50</sub>:** *Not available***LC<sub>50</sub>:** *Not available***Effects of Acute Exposure to Product:****Inhaled:** *Inhalation of nuisance dusts such as calcium sulphate causes little adverse effect on the lungs and does not produce disease or toxic effects elsewhere in the body. High concentrations of dust may cause coughing and mild temporary irritation.***In contact with skin:** *Not absorbed through the skin. Not irritating to the skin.***In contact with eyes:** *May cause temporary mechanical irritation, with redness, tearing, itching and pain.***Ingested:** *Non-toxic by ingestion. Some mild temporary discomfort might occur.***Effects of Chronic Exposure to Product:***Long term inhalation may cause minor, reversible health effects on lungs, such as increased mucous flow. It may be a factor in chronic bronchitis, but other factors such as air pollution and smoking are more important.***Carcinogenicity:** *Not considered carcinogen by NTP, IARC, or OSHA***Teratogenicity:** *No effects expected***Reproductive Effects:** *No effects expected*

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**Mutagenicity:** *Probably not mutagenic***Synergistic Products:** *None known***PREVENTIVE MEASURES****Engineering Controls:** *Local exhaust recommended.***Respiratory Protection:** *Dust mask. NIOSH approved respirator for extremely dusty conditions. For very high or unknown concentrations, as in fire or spill conditions, full face-piece supplied-air respirator or full face-piece, positive-pressure self-contained breathing apparatus.***Eye Protection:** *Chemical safety glasses or goggles.***Skin Protection:** *Wear protective gloves and clean body-covering clothing.***Other Personal Protective Equipment:** *Safety shower and eye-wash fountain in work area.***Leak and Spill Procedure:** *Ventilate area of spill. If spill is large, clean-up personnel may require protective equipment and clothing to protect against dust. Vacuum or sweep up in a manner that does not generate dust, and place in suitable containers for reclamation or disposal. Wash site of spillage thoroughly with water and detergent.***Waste Disposal:** *Follow all federal, provincial and local regulations for disposal.***Handling Procedures and Equipment:** *Workers using this material must be thoroughly trained in its hazards and its safe use and must wear appropriate protective equipment and clothing. 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 materials. Keep containers tightly closed.***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 attention if irritation develops.***Skin:** *Remove contaminated clothing. Brush or wipe off dry material. Wash skin with plenty of water until no evidence of chemical remains. If irritation develops get medical attention.***Inhalation:** *Remove to fresh air. 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***CCINFO disc: Cheminfo**Budavari: The Merck Index, 12th ed., 1997**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:** *February 20, 1990***Revision:** *January 2011***MSDS:** *2720-1***WHMIS Designation:** *Not a controlled product. 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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