

**MATERIAL SAFETY DATA SHEET**

N-1-NAPHTHYLETHYLENEDIAMINE DIHYDROCHLORIDE

PRODUCT CODE NUMBER(S): 5230-1

**PRODUCT IDENTIFICATION****Chemical Name and Synonyms:***N-1-naphthylethylenediamine dihydrochloride***Chemical Family:** *Amine salt***Chemical Formula:**  $C_{10}H_7NHCH_2CH_2NH_2 \cdot 2HCl$ **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>N-1-naphthylethylene-diamine.2HCl</i>	<i>&gt;99</i>	<i>Not established</i>	<i>1465-25-4</i>

**PHYSICAL DATA****Physical State:** *Solid***Odour and Appearance:** *White or off-white powder, becoming pink on exposure to light; may have odour of HCl***Odour Threshold (ppm):** *Not available***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):** *190°C (decomposes)***pH:** *Not available***Specific Gravity:** *Not available***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***Incompatibility with other substances:** *May react with strong oxidizing agents, acids, acid chlorides, and acid anhydrides.***Reactivity:** *Avoid excessive heat, ignition sources, generation of dust.***Hazardous Decomposition Products:** *CO<sub>x</sub>, NO<sub>x</sub>, hydrogen chloride 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:** *Water fog or spray, alcohol foam, dry chemical, carbon dioxide. Water spray can also 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<sub>x</sub>, NO<sub>x</sub>, hydrogen chloride fumes***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:****LD<sub>50</sub>:** *(ipr, mus) 150 mg/kg***LC<sub>50</sub>:** *Not available***Effects of Acute Exposure to Product:****Inhaled:** *May cause mechanical irritation. causing coughing, sneezing. May be harmful.***In contact with skin:** *May cause mechanical irritation. Not expected to be absorbed by skin in toxic amounts.***In contact with eyes:** *May cause mechanical irritation, causing temporary redness and pain.***Ingested:** *No human information available. Consider moderately toxic orally. May be irritating to gastrointestinal tract, causing nausea, vomiting, abdominal pain and diarrhea.***Effects of Chronic Exposure to Product:****Carcinogenicity:** *No evidence of carcinogenicity***Teratogenicity:** *No human or animal information available.***Reproductive Effects:** *No information available***Mutagenicity:** *No information available***Synergistic Products:** *None known*

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**PREVENTIVE MEASURES**

**Engineering Controls:** Local exhaust recommended.

**Respiratory Protection:** Dust mask. Fumehood. Dust mask or respirator with high efficiency particulate filter for dusty conditions. High or unknown concentrations as in fire or spill conditions, NIOSH/MSHA approved positive-pressure, full face-piece self-contained breathing apparatus, or positive-pressure, full face-piece supplied-air respirator with auxiliary positive-pressure self-contained breathing apparatus.

**Eye Protection:** Chemical safety goggles. 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 and ventilate area of spill. Eliminate sources of ignition. Cleanup personnel must be thoroughly trained in the handling of hazardous materials, and must wear protective equipment and clothing sufficient to prevent inhalation of fumes or dust, and contact with skin, eyes or clothing. Mix with inert absorbent, transfer to container using a method that does not generate dust, and arrange removal by disposal company. Prevent from entering sewers or waterways. Wash area of spillage thoroughly with copious amounts of water. Contaminated absorbent may present the same hazards as the chemical; treat with the same care.

**Waste Disposal:** Follow all federal, provincial, and local regulations

**Handling Procedures and Equipment:** IRRITANT, COMBUSTIBLE DUST. Workers should be thoroughly trained in the handling of hazardous materials and in the particular hazards of this material and its safe use, and should wear protective equipment and clothing sufficient to prevent inhalation and contact with skin, eyes or clothing. Keep storage and work areas free of combustible or incompatible materials. Avoid generating dust. If dust is present, observe explosion prevention measures, use non-sparking tools, keep away from heat, sparks, and all sources of ignition; avoid the accumulation of static charge, ground and bond equipment and containers. Use the smallest amounts possible for the purpose, in designated areas with adequate ventilation. Avoid generating dusts or vapours. Avoid all contact and inhalation. Keep containers closed when not in use. Wash thoroughly after handling.

**Storage Requirements:** Store in suitable, labelled containers, in a cool, dry, well ventilated area, away from sources of ignition 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 running water for five to ten (5-10) minutes, or until no trace of chemical remains, holding eyelids open while flushing. Get medical advice if irritation persists.

**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 persists, 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, give 1 to 2 glasses of water to drink to dilute material. Do not induce vomiting. If a large amount has been ingested, or if discomfort occurs, obtain medical attention.

**REFERENCES USED**

CCINFO disc: MSDS's, April 2007

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

Suppliers' Material Safety Data Sheets

**ADDITIONAL INFORMATION**

**Date Issued:** June 28, 1991

**Revision:** April 2010

**MSDS:** 5230-1

**Proposed Whmis Designation:** Insufficient information available

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