



# GLENGARRY CHEMICALS LTD.

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## MATERIAL SAFETY DATA SHEET

### Emergency Telephone Numbers:

CANUTEC: 1-613-996-6666

POISON CONTROL CENTRE: 1-800-268-9017

W.H.M.I.S. CLASSIFICATION: B3, D2B, E

### SECTION I PRODUCT INFORMATION

Product Name : NEUTRAMINE 50  
Product Use : Steam Boiler Treatment  
Chemical Family : Amines  
Chemical Formula :  $(C_2H_5)_2NC_2H_4OH$

### SECTION II HAZARDOUS INGREDIENTS

COMPONENTS	Wt / Wt %	LD <sub>50</sub> Oral-rat	HAZARD	CAS NO.
Diethylaminoethanol	30 to 70	1300 mg/kg	Corrosive, Toxic	100-37-8

### SECTION III PHYSICAL STATE

Appearance and Physical State : Clear and Colourless Liquid  
Odour : Amine Odour Boiling Point (°C) : Not Available  
Specific Gravity (water = 1) : 0.96 Freezing Point (°C) : Not Available  
Vapour Pressure (mm Hg) : 1.4 (DEAE) % Volatile ( by weight ) : 60 - 100  
Vapour Density (air = 1) : 4 (DEAE) pH Product : 12.0 - 12.5  
Evaporation Rate : Not Available pH 1% Solution :  
Solubility in Water : Miscible Coefficient of Water/Oil Distribution : Not Available

### SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flammability: Combustible Liquid  
Upper Explosive Limit : 7 % (DEAE) Lower Explosive Limit : 12% (DEAE)  
Flash Point : 50 °C (DEAE)  
Means of Extinction: Appropriate for surrounding materials.  
Special Procedures : Self contained breathing apparatus and protective clothing should be worn in fighting all fires involving chemicals.

### SECTION V HEALTH HAZARD DATA

#### A - EFFECTS OF ACUTE OVEREXPOSURE

**EYES:** Corrosive to eyes. May cause severe irritation, redness and pain. May cause corneal damage, conjunctivitis, and blindness.  
**SKIN:** May cause severe skin irritation or burns. May be harmful if absorbed through the skin.  
**INHALATION:** Vapor may be severely irritating to the eyes, skin and upper respiratory tract and may produce temporary blurring of vision, coughing, chest pain and shortness of breath.  
**INGESTION:** Moderately toxic. Causes severe irritation or chemical burns of the mouth, throat, esophagus, and stomach, with pain or discomfort in the mouth, throat, chest, and abdomen, nausea, vomiting, diarrhea, dizziness, drowsiness, thirst, faintness, weakness, circulatory collapse, and coma.

#### B - EFFECTS OF CHRONIC OVEREXPOSURE

No skin allergy was observed in guinea pigs following repeated exposure. Repeated exposure to vapor produced irritation of the nose, respiratory tract and eyes with nasal turbinate lesions, corneal opacities and slightly decreased body weights in rats. Longer-term vapor exposure of rats also resulted in irritation of the eyes, nose and respiratory tract. Testicular atrophy occurred in a long term feeding study in rats, but no tumors were observed. Oral administration to pregnant rats produced a decrease in the number of viable embryos. No birth defects or any effects on offspring were noted in rats after inhalation exposure during pregnancy, even at a levels which produced irritant effects and reduced weight gain in the mothers. No genetic changes were observed in standard tests using bacteria, animals or animal cells.

## SECTION VI EMERGENCY AND FIRST AID

- EYES:** Wash with copious amount of cold water for at least 20 minutes keeping eyelids open. If irritation persists, repeat flushing. Obtain medical attention immediately.
- SKIN:** Immediately wash the affected areas with plenty of water. If irritation, redness or burning sensation develops obtain medical advice.
- INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
- INGESTION:** Do not attempt to give anything by mouth to an unconscious person. If person is alert and not convulsing rinse mouth out and give 1-2 glasses of water to dilute material and seek medical attention immediately.

## SECTION VII TOXICOLOGICAL DATA

- Exposure Limits:** OSHA & NIOSH TLV: 10 ppm TWA; 50 mg/m<sup>3</sup> TWA (DEAE)
- Carcinogenicity:** The ingredients of this product are not classified as carcinogens by ACGIH or IARC, not regulated as carcinogen by OSHA, and not listed as carcinogen by NTP.
- Reproductive Effects:** See Section V(B)
- Mutagenic Effects:** See Section V(B)
- Teratogenic Effects:** See Section V(B)
- Sensitization:** See Section V(B)
- Routes of Entry:** Ingestion, Inhalation, Skin and eye absorption.

## SECTION VIII SPILL OR LEAK PROCEDURES

### Steps To Be Taken In Case Material Is Spilled Or Released:

Extinguish or turn off all ignition sources. Ventilate the space involved. Wear appropriate personal protection equipment. Contain spill with inert materials. Collect with non-sparking tools to a suitable container. Prevent waterway contamination. Absorb liquid onto inert absorbent and collect for disposal.

### Disposal Procedures:

Follow your local, provincial, and federal government chemical disposal regulations.

## SECTION IX PROTECTION INFORMATION

- Engineering Controls:** If practical, use local mechanical exhaust ventilation.
- Respiratory Protection:** NIOSH/MSHA approved respirator for amines.
- Protective Clothing:** Butyl rubber, Nitrile or Polyvinyl alcohol Gloves, chemical resistant clothing such as a rubber apron should be worn when handling this material.
- Eye Protection:** Chemical safety goggles.
- Other Protective Equipment:** Eye Wash Station and Safety Shower.

## SECTION X REACTIVITY DATA

- Stability:** Stable.
- Conditions to Avoid:** High temperatures, Flames, Sparks and other sources of ignition
- Hazardous Polymerization:** Will Not Occur.
- Incompatibility to Other Substances:** Avoid contact with strong oxidizers (perchlorates, nitrates, peroxides), strong acids, and halogens. All amines, under certain conditions, may form nitrosamines; avoid mixing with nitrites.
- Hazardous Combustion Products:** Thermal decomposition products are toxic and may include nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen.

## SECTION XI HANDLING AND STORAGE PRECAUTIONS

Use normal "good" industrial hygiene and housekeeping practices, and wear safety equipment when handling this material. Keep containers closed when not in use. Store in a cool dry, well ventilated area away from heat and sources of ignition such as flame, sparks and static electricity and away from incompatible materials.

## SECTION XII FURTHER INFORMATION

### TDG CLASSIFICATION:

**Shipping Name:** 2-DIETHYLAMINOETHANOL  
**UN Number:** UN2686      **Class:** 8 (3)      **Packing Group:** II

### Preparation Information:

**Prepared By:** Regulatory Department  
**Revision Date:** 1-Oct-14      **Preparation Date:** 21-Apr-97

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