



Comet Chemical Company Ltd.  
3463 Thomas Street Innisfil ,ON L9S 3W4  
Tel: (705) 436-5580 Fax: (705) 436-7194

## Material Safety Data Sheet

### MONOETHANOLAMINE

Revision Date: 2008/06/14

#### Section 1 : PRODUCT AND COMPANY IDENTIFICATION

**Chemical family:** Mixture.

**Product uses:** Neutralisation of acid gases, detergent formulations, paint, polishes, corrosion inhibitor, pharmaceuticals.

**Product name:** Monoethanolamine

**Supplier:** Comet Chemical Ltd.  
3463 Thomas Street  
Innisfil, On.  
L9S 3W4.

**Supplier 24 hour phone number:** (705)436-5580 – weekdays from 8:00-5:00.  
(800)567-7455 all other times (Newalta Services).

#### Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
111-42-2	< 1	DIETHANOLAMINE	2 MG/M3 (SKIN)	620 UL/KG RAT ORAL 3300 MG/KG MOUSE ORAL 2200 MG/KG RABBIT ORAL 7640 MG/KG RABBIT DERMAL	NOT AVAILABLE
141-43-5	99	ETHANOLAMINE	3 PPM	1720 MG/KG RAT ORAL 700 MG/KG MOUSE ORAL 1 ML/KG RABBIT DERMAL 1000 MG/KG RABBIT ORAL	NOT AVAILABLE

#### Section 2A: ADDITIONAL INGREDIENT INFORMATION

**Note:** (supplier).

CAS# 141-43-5: LD50 620 mg/kg rat oral.

CAS# 141-43-5: LD50 1000 mg/kg rabbit dermal.

CAS# 141-43-5: LC50 2400 mg/m3 rat inhalation.

CAS# 111-42-2: TLV 0.5 ppm.

CAS# 111-42-2: LD50 7600 mg/m3 rabbit dermal.

### Section 3 : HAZARD IDENTIFICATION

**Route of entry:** Eye contact, skin contact, skin absorption, inhalation and ingestion.

#### Effects of acute exposure

**Eye contact:** May cause eye damage.  
May cause blindness.  
Severe irritation.

**Skin contact:** May cause ulceration.  
Possible tissue damage.  
Irritation, redness and pain.  
Possible bleeding.

**Skin absorption:** Harmful if absorbed through skin.

**Inhalation:** Irritant.  
May cause irritation to nose.  
May cause coughing and chest pain.  
May cause nasal discharge.

**Ingestion:** May cause vomiting and diarrhea.  
May cause drowsiness.  
May be fatal.  
May cause discomfort.  
May cause weakness.  
May cause dizziness.  
May cause abdominal pain.  
Severe irritation.  
May cause thirst.  
May cause circulatory system failure.  
Causes chemical burns to mouth, throat and stomach.  
May cause fainting.

**Effects of chronic exposure:** May cause liver and kidney damage.  
May aggravate an existing dermatitis.  
Pre-existing diseases of the lungs may be aggravated by exposure.  
Prolonged or repeated overexposure may cause drying and cracking of the skin (dermatitis).

**Sensitization to product:** No

**Carcinogenic effects:** Not listed as a carcinogen.

**Reproductive effects:** Reproductive effects reported in animals.

**Teratogenicity:** Not available.

**Mutagenicity:** Not available.

**Synergistic materials:** Not available.

### Section 4 : FIRST AID MEASURES

**Skin contact:** Wash thoroughly with soap and water.  
Remove contaminated clothing.  
Consult a physician if irritation persists.

**Eye contact:** Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.

**Inhalation:** Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.

**Ingestion:** Obtain immediate medical attention.  
Give large quantities of water to drink.  
Do not induce vomiting, keep person warm, quiet.  
Guard against aspiration of liquids into lungs.  
If vomiting occurs, keep head below hips.  
Never give anything by mouth to an unconscious person.

**Additional information:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

## Section 5 : FIRE FIGHTING MEASURES

**Flammability:** Not flammable.

**Conditions of flammability:** At temperatures at or above flash point.

**Extinguishing media:** Dry chemical.  
Foam  
Water fog.  
Water spray.  
Do not use direct water jet.

**Special procedures:** Self-contained breathing apparatus required.  
Use water spray to cool fire exposed containers.

**Auto-ignition temperature (°C):** Not available.

**Flash point (°C), method:** 96°C

**Lower flammability limit (% vol):** Not available.

**Upper flammability limit (% vol):** Not available.

### Explosion Data

**Sensitivity to static discharge:** Not sensitive.

**Sensitivity to mechanical impact:** Not sensitive.

**Hazardous combustion products:** Carbon monoxide (CO).  
Smoke  
Nitrogen oxides (NOx).  
Irritating fumes.

**Rate of burning:** Not available.

**Explosive power:** Not available.

## Section 6 : ACCIDENTAL RELEASE MEASURES

**Leak/Spill:** Eliminate all sources of ignition.  
Dike area to prevent spreading.  
Ventilate area.  
Wear appropriate protective equipment.  
Ground handling equipment.  
Pump to containers or soak up on inert absorbent.  
Place in a closed container for disposal.  
Do not flush to sewer.

## Section 7 : HANDLING AND STORAGE

- Handling procedures and equipment:** Keep away from heat, sparks, and open flame.  
Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wear personal protective equipment appropriate to task.  
Avoid contact with skin, eyes and clothing.  
Do not cut, grind, weld or drill on or near containers.  
Launder contaminated clothing prior to reuse.
- Storage requirements:** Store away from all sources of ignition.  
Store away from incompatible materials.  
Store below 48.8°C (120°F).  
Store in a cool, dry and well ventilated area.

## Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

### Precautionary Measures

**Gloves/Type:**



Butyl rubber.  
Neoprene or nitrile gloves.  
Viton gloves.

- Respiratory/Type:** None required under normal use.  
If TLV is exceeded.



NIOSH approved organic vapors.

**Eye/Type:**



Safety glasses with side-shields.



Chemical safety goggles.

**Footwear/Type:**



Rubber boots.

- Clothing/Type:** Long sleeve shirt, long trousers.  
When splashing is possible.  
PVC apron.  
Rubber apron.

- Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

- Ventilation requirements:** As needed to stay below TLV.

**Exposure limit of material:** Not available for mixture, see the ingredients section.

### Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Appearance & odor:** Viscous.  
Clear  
Fishy odour.  
Hygroscopic.  
Colorless.

**Odor threshold (ppm):** 2.6 ppm

**Vapour pressure (mmHg):** 0.2 mmHg / 0.27 kPa @ 20°C

**Vapour density (air=1):** 2.1

#### Volatiles (%)

**By volume:** Not available.

**Evaporation rate  
(butyl acetate = 1):** Not available.

**Boiling point (°C):** 171°C

**Freezing point (°C):** (Supercools readily to -10°C or lower).  
10.5°C

**pH:** Strong alkali.  
~ 12 (25% solution)

**Specific gravity @ 20 °C:** 1.02

**Solubility in water (%):** 100% (20°C)

**Coefficient of water\oil dist.:** Not available.

**VOC:** Not available.

### Section 10 : STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Conditions of instability:** Contact with incompatible substances.

**Hazardous polymerization:** Will not occur.

**Incompatible substances:** Aldehydes.  
Ketones.  
Acrylates.  
Strong acids and alkalis.  
Strong oxidizing agents.  
Organic anhydrides.  
Oxalates.  
Formates.  
Lactones.

**Hazardous decomposition  
products:** See hazardous combustion products.

### Section 11 : TOXICOLOGICAL INFORMATION

**LD50 of product, species & route:** 1000 mg/kg Rabbit dermal.  
1000 mg/kg rabbit oral.  
700 mg/kg mouse oral.

**LC50 of product, species & route:** Not available for mixture, see section 2A.

### Section 12 : ECOLOGICAL INFORMATION

**Environmental toxicity:** No data at this time.

**Environmental fate:** No data at this time.

### Section 13 : DISPOSAL CONSIDERATIONS

**Waste disposal:** In accordance with municipal, provincial and federal regulations.  
May be incinerated.

### Section 14 : TRANSPORT INFORMATION

**TDG classification:** ETHANOLAMINE  
UN2491  
Class 8  
PG III.



**Special shipping information:** See transportation information.

### Section 15 : REGULATORY INFORMATION

**WHMIS classification:**

B3, E



**DSL status:** The substance(s) listed in section 2 appear on the Domestic Substances List.

### Section 16 : OTHER INFORMATION

**Supplier MSDS date:** 2008/06/14

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