



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

## Material Safety Data Sheet

### SODIUM HYDROXIDE (50% SOL'N)

Revision Date: 2008/05/08

#### Section 1 : PRODUCT AND COMPANY IDENTIFICATION

**Chemical family:** Mixture.

**Product uses:** Manufacture of soap, rayon & cellophane, neutralising agent, etc.

**Product name:** Sodium Hydroxide (50% Sol'n) (Caustic Soda Liquid, NaOH Solution)

**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
1310-73-2	50	SODIUM HYDROXIDE	2 MG/M3 (CL)	NOT AVAILABLE	NOT AVAILABLE

#### Section 2A: ADDITIONAL INGREDIENT INFORMATION

**Note:** (supplier).  
CAS# 1310-73-2: LD50 > 500 mg/kg rat oral.

#### Section 3 : HAZARD IDENTIFICATION

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

##### Effects of acute exposure

**Eye contact:** Extremely corrosive.  
May cause permanent damage.

**Skin contact:** Causes severe burns.  
May cause ulceration and scarring.

**Skin absorption:** Not absorbed through the skin.

**Inhalation:** May cause severe damage to respiratory system.

**Ingestion:** Risk of perforation of the stomach.  
Severe burns to mouth and digestive system.

**Effects of chronic exposure:** Prolonged or repeated skin contact may cause drying or cracking of skin.

**Sensitization to product:** No

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

**Reproductive effects:** No effects reported.

**Teratogenicity:** Not available.

**Mutagenicity:** Not available.

**Synergistic materials:** None known.

#### 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:** Surrounding fire.

**Extinguishing media:** Use appropriate extinguishing media for surrounding fire.

**Special procedures:** Firefighters should wear adequate protective gear.  
Self-contained breathing apparatus required.

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

**Flash point (°C), method:** Non-flammable.

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

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

#### Explosion Data

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

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

**Hazardous combustion products:** Carbon monoxide (CO).  
Peroxides.  
Sodium hydroxide (NaOH).  
Carbonates.

**Rate of burning:** Not available.

**Explosive power:** Flammable hydrogen gas may be produced on prolonged contact with metals such as tin, lead and zinc.

#### Section 6 : ACCIDENTAL RELEASE MEASURES

**Leak/Spill:** Sweep up.  
Eliminate all sources of ignition.  
Dike area to prevent spreading.  
Ventilate area.  
Wear appropriate protective equipment.  
Neutralise with sodium bicarbonate.  
Place in a closed container for disposal.  
Do not flush to sewer.  
Neutralize with dilute acid.

#### 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 incompatible materials.  
Store in a cool, dry and well ventilated area.

#### Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Precautionary Measures

**Gloves/Type:**



Rubber gloves.  
Neoprene or PVC recommended.

**Respiratory/Type:** If TLV is exceeded.



NIOSH/MSHA approved with dust/mist/fume cartridge.

**Eye/Type:**



Safety glasses with side-shields.



Face shield.



Chemical safety goggles.

**Footwear/Type:**



Impervious boots.

**Clothing/Type:** Long sleeve shirt, long trousers.  
Neoprene, PVC or 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.  
Mechanical ventilation is recommended.

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

## Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Appearance & odor:** Odourless.  
Colourless.  
Heavy liquid.  
Pearlescent.

**Odor threshold (ppm):** Not applicable.

**Vapour pressure (mmHg):** 1.5 (20°C)

**Vapour density (air=1):** Not applicable.  
Water vapour.

### Volatiles (%)

**By volume:** Not available.

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

**Boiling point (°C):** (will rise as water evaporates from solution).  
140°C

**Freezing point (°C):** (sodium hydroxide begins to crystallise out of solution at this temperature).  
13°C

**pH:** 14

**Specific gravity @ 20 °C:** 1.52

**Solubility in water (%):** Complete.  
(also readily miscible with methyl & ethyl alcohols & glycols).

**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:** Water  
Acids  
Aluminum (Al).  
Zinc (Zn).  
Copper (Cu).  
Glycols.  
Organic peroxides.  
Tin  
Sugars.  
Organohalogenes.  
Damages leather, wool and silks.

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

## Section 11 : TOXICOLOGICAL INFORMATION

**LD50 of product, species & route:** 1000 mg/kg – rat oral.

**LC50 of product, species & route:** Not available.

## 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.  
Dispose of waste product in a sanitary landfill.

## Section 14 : TRANSPORT INFORMATION

**TDG classification:** SODIUM HYDROXIDE SOLUTION  
UN1824  
Class 8  
PG II.



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

## Section 15 : REGULATORY INFORMATION

**WHMIS classification:**

E



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

<b>Section 16 : OTHER INFORMATION</b>
---------------------------------------

**Supplier MSDS date:** 2008/05/08

This MSDS was generated by *Conform-Plus* Application Service. Visit us at [www.netmsds.com](http://www.netmsds.com).