

**H<sub>2</sub>O PRIMER**

Offerte en français

<b>HEALTH CANADA</b>	<b>PROTECTIVE CLOTHING</b>	<b>TRANSPORT OF DANGEROUS GOODS</b>
Not regulated		Not regulated

**SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Use:** Water-based primer for membrane.

**Formula number:** 508.1

**Manufacturer:** Soprema Canada Inc.  
1675 Haggerty Street  
Drummondville (Quebec) J2C 5P7  
CANADA  
Tel.: 819 478-8163

**Distributor:** Resisto Division, Soprema Canada Inc.  
1675 Haggerty Street  
Drummondville (Quebec) J2C 5P7  
CANADA  
Tel.: 819 478-8408 – 1 887 478-8408

**In case of emergency:**

SOPREMA (8:00am to 5:00pm): 1 800 567-1492

CANUTEC (Canada) (24h.): 613 996-6666

CHEMTREC (USA) (24h.): 1 800 424-9300

**EMERGENCY OVERVIEW!!!**

Blue liquid. May be harmful if swallowed. This product contains a chemical known to cause reproductive and developmental effects. The product may cause respiratory tract irritation. May cause damage to kidney through prolonged or repeated exposure by ingestion.

**SECTION II: COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS**

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
Ethylene Glycol	107-21-1	0.1 - 1	100 mg/m <sup>3</sup>	Not established

**SECTION III: POTENTIAL HEALTH EFFECTS**

*Effects of Short-Term (Acute) Exposure*

**SKIN CONTACT**

**Ethylene Glycol:**

Liquid may cause irritation. Human information is not available, but ethylene glycol was a mild irritant in an animal study. Ethylene glycol a mild irritant in an animal study. Ethylene glycol can be absorbed through skin damaged by eczema. Extent of absorption through undamaged skin is unknown. However, animal studies suggest that toxic effects could occur as a result of extensive and prolonged skin contact. Symptoms may be similar to those described for ingestion. (1)

**EYE CONTACT**

**Ethylene Glycol:**

Liquid may cause irritation. Vapour and mist may cause irritation. Human information is not available, but some animals exposed to ethylene glycol continuously for several days developed eye irritation. (1)

**INHALATION**

**Ethylene Glycol:**

Vapour and mist can cause irritation of the nose and throat. Vapour concentrations are normally too low at room temperature to cause significant toxic effects from vapour alone. Exposure to vapour and mists is possible, however at elevated temperatures, and adverse effects have been reported from exposure to mists. (1)

**INGESTION**

**Ethylene Glycol:**

Ethylene glycol can cause nausea, vomiting, abdominal pain and weakness, as well as drunkenness, dizziness, stupor, convulsions and coma (symptoms of depression of the central nervous system). Death could result from respiratory arrest or cardiovascular collapse. In humans, a dose of 100 ml may cause death. If the victim survives, kidney failure may develop within the next several days. In some instances, vision disturbances have been reported. The persistence of these lesions could not be determined. (1)

*Effects of Long-Term (Chronic) Exposure*

**SKIN SENSITIVITY**

**Ethylene Glycol:**

Two cases of sensitization to ethylene glycol have been reported in people occupationally exposed to this chemical during polishing and cutting of glass lenses. (1)

**INGESTION**

**Ethylene Glycol:**

Human information is not available, but animals' studies indicate that repeated ingestion can cause formation of bladder and kidney stones, as well as kidney damage. (1)

**CARCINOGENICITY**

**Ethylene Glycol:**

No human information. Not carcinogenic in animal studies. The International Agency for Research on Cancer (IARC) has not evaluated the carcinogenicity of this chemical. The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens. (1)

**TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY**

**Ethylene Glycol:**

No human information. Embryotoxic and teratogenic in animal feeding studies at high doses which were not maternally toxic. (1)

**REPRODUCTIVE TOXICITY**

**Ethylene Glycol:**

No human information. In an animal study, long-term ingestion of ethylene glycol did not affect fertility of male or female rats. (1)

**MUTAGENICITY**

**Ethylene Glycol:**

No human information. An in-vivo animal study was negative. (1)

**TOXICOLOGICALLY SYNERGISTIC MATERIALS**

**Ethylene Glycol:**

Information not available.

## POTENTIAL FOR ACCUMULATION

### *Ethylene Glycol:*

Ethylene glycol is broken down in the body and excreted. Break-down products include glycolic acid and oxalic acid, which are thought to play a role in some of the toxic effects observed. (1)

## SECTION IV: FIRST AID MEASURES

### SKIN CONTACT

Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, get medical attention.

### EYE CONTACT

Flush thoroughly with water for at least 15 minutes. If irritation persists, get medical attention.

### INHALATION

In case of gas or vapour inhalation, move victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, give respiratory assistance. Obtain medical assistance.

### SWALLOWING

Do not induce vomiting. Immediately contact local poison control centre. Should vomiting occur, be sure to keep the victim's head below hips to avoid aspiration of vomit into the lungs. Maintain the victim at rest and obtain immediate medical attention.

## SECTION V: FIRE FIGHTING MEASURES

**FLAMMABILITY:** Non flammable

**FLASH POINT:** Non flammable

**AUTO-IGNITION TEMPERATURE:** Not applicable

**FLAMMABILITY LIMITS IN AIR:** (% en volume) Not applicable

### FIRE HAZARDS

Non flammable water-based product. Concentration of alcohols is too low to create a fire hazard.

### COMBUSTION PRODUCTS

Irritating and/or toxic gases or fumes such as CO, CO<sub>2</sub> may be generated by thermal decomposition or combustion of the product.

### FIRE FIGHTING INSTRUCTIONS

Evacuate area. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standards. Approach fire from upwind and fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Always stay away from containers because of the risk of explosion. Stop leak before attempting to put out the fire. If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out. Move containers from fire area if this can be done without risk. Cool containers with flooding quantities of water until well after fire is out.

### EXTINGUISHING MEDIA

Foam, CO<sub>2</sub> powder, sand, chemical powder.

## SECTION VI: ACCIDENTAL RELEASE MEASURES

### RELEASE OR SPILL

Wear appropriate protective equipment during cleanup. Shut off source of leak if you can do it without risk. Contain the spill. Absorb with inert material such as sand or earth. Shovel into containers with lids. Cover and remove to appropriate well-ventilated area until disposal. Wash spill area with soap and water. Prevent entry into waterways, sewers or basements. Dispose of this product according to local environmental regulations.

## SECTION VII: HANDLING AND STORAGE

### HANDLING

This product is non flammable. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapours and dusts. Wash thoroughly after handling. Tightly reseal all partially used containers. Use under appropriate conditions of ventilation. Keep away from heat. Do not cut, puncture or weld empty containers.

## STORAGE

Store in a cool well-ventilated area out of direct sunlight and away from heat and ignition sources. Do not store at temperatures lower than 5°C or over than 90°C. Keep away from children.

## SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

**HANDS:** Wear appropriate gloves (viton, nitrile, PVC, neoprene).

**RESPIRATORY:** If the TLV is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with standards.

**EYES:** Wear chemical safety goggles in accordance with standards.

**OTHERS:** Eye bath and safety shower.

**CONTROL OF VAPOURS:** Local exhaust is needed to control vapour and dust level to below recommended limits.

## SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	Liquid
<b>ODOUR AND APPEARANCE:</b>	Blue liquid
<b>ODOUR THRESHOLD:</b>	Not available
<b>VAPOUR DENSITY (air = 1):</b>	Not available
<b>EVAPORATION RATE (Butyl acetate = 1):</b>	Not available
<b>BOILING POINT (760 mm Hg):</b>	100°C
<b>FREEZING POINT:</b>	0°C
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	1 g/ml
<b>SOLUBILITY IN WATER (20°C):</b>	Soluble
<b>PH:</b>	7-9
<b>VOLATILE ORGANIC COMPOUND CONTENT (V.O.C.):</b>	3 g/L
<b>VISCOSITY:</b>	Not available

## SECTION X: STABILITY AND REACTIVITY

**STABILITY:** This material is stable.

**CONDITIONS OF REACTIVITY:** Avoid excessive freezing and heat.

**INCOMPATIBILITY:** Solution or acid emulsion.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, nitrogen and sulphur oxide.

**HAZARDOUS POLYMERISATION:** None

## SECTION XI: TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL DATA

*Ethylene Glycol:* (1)

LD50 (oral, rat): 5.89 g/kg; 8.54 g/kg; 13.0 g/kg

LD50 (dermal, rabbit): 9.5 g/kg

### *Effects of Short-Term (Acute) Exposure*

#### EYE IRRITATION

*Ethylene Glycol:*

*LIQUID (rabbit):* Application of 0.5 ml undiluted ethylene glycol did not cause irritation.

*VAPOUR:* Animals exposed to 57 mg/m<sup>3</sup> (23 ppm) ethylene glycol, 8 hr/day, 5 days/week for 6 weeks did not develop irritation.

Rats and rabbits exposed continuously to 12 mg/m<sup>3</sup> (4.8 ppm) ethylene glycol for several days exhibited moderate to severe irritation. Irritation was not observed in guinea pigs, monkeys or dogs. (1)

#### SKIN IRRITATION

*Ethylene Glycol:*

Application of 555 mg (0.5 ml) was reported to cause mild irritation (original not available). (1)

### *Effects of Long-Term (Chronic) Exposure*

#### INHALATION

*Ethylene Glycol:*

Toxic effects were not observed in animals. (1)

## INGESTION (rat, monkey)

### Ethylene Glycol:

Repeated ingestion of ethylene glycol caused bladder and kidney stone formation, and kidney damage. Males seemed more susceptible to toxic effects of ethylene glycol than females. (1)

## CARCINOGENICITY

### Ethylene Glycol:

Ethylene glycol did not produce tumours in rats when administered as 1% of the diet for 2 years. In other studies, ethylene glycol did not cause tumours in rats or mice when injected repeatedly under the skin. (1)

## EMBRYOTOXICITY

### Ethylene Glycol:

Embryotoxicity (for example, decreased birth weight and survival) was observed in offspring of mice given 1% ethylene glycol in their drinking water over 14 weeks, but not in offspring of rats fed 1 000 mg/kg/day, over 3 generations. Parental toxicity was not significant in these studies. Embryotoxicity was seen when mice were fed 750-3 000 mg/kg/day for several days during pregnancy. In a similar study with rats, embryotoxicity was seen at doses of 2 500-5 000 mg/kg/day but not at 1 250 mg/kg/day. Maternal toxicity was not significant in these studies. Birth weight and length were decreased in offspring of rats fed 1 078 or 1 595 mg/kg/day for 10 days during pregnancy. Maternal toxicity was not discussed in the English abstract (translation of paper not available). (1)

## TERATOGENICITY

### Ethylene Glycol:

Malformations were seen in offspring of mice fed 750-3 000 mg/kg/day and rats fed 1 250-5 000 mg/kg/day for several days during pregnancy. Maternal toxicity was not significant in these studies. Malformations were not seen in offspring of rats fed up to 1 000 mg/kg/day for several days during pregnancy. In another study, rats were fed 253-1 595 mg/kg/day for 10 days during pregnancy. Doses of 1 078 and 1 595 mg/kg were teratogenic (e.g. fissure in wall of abdomen, brain located outside the skull, harelip, and rib malformations). Maternal toxicity was not discussed in the English abstract (translation of paper not available). (1)

## FERTILITY

### Ethylene Glycol:

No effects on fertility were observed when male and female rats were fed up to 1 000 mg/kg day over 3 generations. (1)

## MUTAGENICITY

### Ethylene Glycol:

Not mutagenic to bacteria. Mutagenic in studies with isolated mammalian cells. Did not cause an increase in dominant lethal mutations in offspring of male rats fed 1 000 mg/kg/day for approximately 14 weeks prior to mating. (1)

## SECTION XII: ECOLOGICAL INFORMATION

### ENVIRONMENTAL EFFECTS

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life.

## SECTION XIII: DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

Consult local, state, provincial or territory authorities to know disposal methods.

## SECTION XIV: TRANSPORT INFORMATION

This product is not regulated by DOT and TDG.

## SECTION XV: REGULATORY INFORMATION

### WHMIS

**D2A:** Other toxicological effects: (Teratogenicity and Embryotoxicity).

**DSL:** All constituents of this product are included in the Domestic Substances List (DSL – Canada)

**TSCA:** All constituents of this product are included in the Toxic Substances Control Act Inventory (TSCA – USA).

HMIS (USA):		NFPA (USA):	
Health	1	Health	1
Flammability	0	Flammability	0
Reactivity	0	Reactivity	0
Protective equipment	B	Specific hazard	

## SECTION XVI: OTHER INFORMATION

### GLOSSARY

<b>ANSI:</b>	American National Standards Institute
<b>ASTM:</b>	American Society for Testing and Materials
<b>CAS:</b>	Chemical Abstract Services
<b>CSA:</b>	Canadian Standardisation Association
<b>DOT:</b>	Department of Transportation (United States)
<b>EPA:</b>	Environmental Protection Agency (United States)
<b>HMIS:</b>	Hazardous Material Information System
<b>LD50/LC50:</b>	Less high lethal dose and lethal concentration published
<b>NFPA:</b>	National Fire Protection Association (United States)
<b>OSHA:</b>	Occupational Safety & Health Administration (United States)
<b>RCRA:</b>	Resource Conservation and Recovery Act (United States)
<b>TDG:</b>	Transportation of Dangerous Goods
<b>TLV-TWA:</b>	Threshold Limit Value – Time-weighted average
<b>WHMIS:</b>	Workplace Hazardous Materials Information System (Canada)

### Reference:

(1) CHEMINFO (2011) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada

**Code of MSDS:** CA U DRU SS FS 085

**For more information:** 1 800 567-1492

The Material Safety Data Sheets of RESISTO Canada are available on Internet at the following site: [www.resisto.ca](http://www.resisto.ca).

### Justification of the update:

- Triennial update.
- New format.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

### Bar Codes:

H<sub>2</sub>O Primer:

6 23680 30111 5

6 23680 30112 2

6 23680 30113 9

6 23680 30114 6