



MATERIAL SAFETY DATA SHEET
ACRYLIC ASPHALT SEALER
2 YEARS

Offerte en français

HEALTH CANADA	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
NOT REGULATED		NOT REGULATED

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Use: Acrylic protector for asphalted surfaces.

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

Distributor: Resisto Division, Soprema Canada
 1675 Haggerty Street
 Drummondville (Quebec) J2C 5P7
 CANADA
 Tel.: 819 478-8408 – 1 877 478-8408

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

Black liquid. May be harmful if swallowed. This product contains a chemical known to cause reproductive and developmental effects. This 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	0.1-1.0	100 mg/m ³	Not established

SECTION III: POTENTIAL HEALTH EFFECTS

Effects of Short-Term (Acute) Exposure

INHALATION

Ethylene Glycol: Ethylene glycol does not readily form a vapour at normal temperatures. Therefore, it must be heated or misted before inhalation exposure can occur. In studies with volunteers, continuous exposure to up to 63 mg/m³ had no noticeable effects, while brief exposure to 127 mg/m³ and higher caused throat and upper respiratory tract irritation. Exposure to 244 mg/m³ was not tolerable. (1)

SKIN CONTACT

Ethylene Glycol: Ethylene glycol is not irritating or a very mild irritant, based on animal and unconfirmed human information. Ethylene glycol is absorbed through the skin, but significant harmful effects are not expected by this route of exposure. (1)

EYE CONTACT

Ethylene Glycol: Ethylene glycol is not irritating or a very mild eye irritant, based on animal information. (1)

INGESTION

Ethylene Glycol: Ethylene glycol can cause significant harmful effects if ingested. There are numerous reports of kidney injury, nervous system injury and deaths in people who accidentally or intentionally ingested ethylene glycol. Ingestion is not a typical route of occupational exposure. (1)

Effects of Long-Term (Chronic) Exposure

SKIN SENSITIZATION

Ethylene Glycol: Ethylene glycol is not considered an occupational skin sensitizer, because of the small number of cases located. (1)

KIDNEYS / URINARY SYSTEM

Ethylene Glycol: No conclusions about kidney effects can be drawn from studies in humans with long-term exposure to ethylene glycol. Short- and long-term ingestion exposure in animals to doses of about 1 000 mg/kg/day and higher has resulted in degenerative changes in the kidneys including tubule dilation, inflammation and deposition of oxalate crystals and stones. (1)

BLOOD/BLOOD FORMING SYSTEM

Ethylene Glycol: Twenty male volunteers who were exposed to an average of 17-49 mg/m³ ethylene glycol aerosol (purity not reported) for 30 days (20-22 hours/day) had no significant effects on blood composition. (1)

CARCINOGENICITY

Ethylene Glycol: The available evidence does not indicate that ethylene glycol is a carcinogen. 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: Ethylene glycol is considered a developmental hazard based on animal evidence. In rats and mice, embryotoxic (late resorptions), fetotoxic (reduced fetal body weight) and teratogenic (external, soft tissue and skeletal defects) effects were observed at relatively high oral doses that caused no or minimal maternal toxicity. However, the US National Toxicology Program-Center for the Evaluation of Risks to Human Reproduction (NTP-CERHR) has concluded that the likelihood of developmental toxicity occurring in humans with occupational or consumer exposures is considered negligible, primarily because of the high doses needed to produce effects. (1)

REPRODUCTIVE TOXICITY

Ethylene Glycol: The animal studies located do not suggest that ethylene glycol is a reproductive toxin. No human information was located. (1)

MUTAGENICITY

Ethylene Glycol: The available information does not indicate that ethylene glycol is mutagenic. No human information was located. (1)

POTENTIAL FOR ACCUMULATION

Ethylene Glycol: Does not accumulate. Ethylene glycol is readily absorbed from the digestive tract and through the lungs and is rapidly distributed throughout the body. (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, CO₂ 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, CO₂ 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 not 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

PHYSICAL STATE:	Liquid
ODOUR AND APPEARANCE:	Black liquid
ODOUR THRESHOLD:	Not available
VAPOUR DENSITY (air = 1):	Not available
EVAPORATION RATE (Butyl acetate = 1):	Not available
BOILING POINT (760 mm Hg):	100°C
FREEZING POINT:	0°C
SPECIFIC GRAVITY (H₂O = 1):	1 g/ml
SOLUBILITY IN WATER (20°C):	Soluble
PH:	7-9
VOLATILE ORGANIC COMPOUND CONTENT (V.O.C.):	18.2 g/l (2 ans) / 160.2 g/l (5 ans)
VISCOSITY:	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 oxides.

HAZARDOUS POLYMERISATION: None.

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

Ethylene Glycol: (1)

LC₅₀ (rat): 2 725 mg/m³ (4-hour exposure); cited as 10.9 mg/L (1-hour exposure) (assumed aerosol)

LD₅₀ (oral, female rat): 4 000 mg/kg (cited as 4.0 g/kg); (greater than 99% purity)

LD₅₀ (dermal, rabbit): 9 530 mg/kg (cited as 9.53 g/kg)

Effects of Short-Term (Acute) Exposure

EYE IRRITATION

Ethylene Glycol: Ethylene glycol is not irritating or a very mild eye irritant. (1)

SKIN IRRITATION

Ethylene Glycol: Ethylene glycol is not irritating or a very mild irritant. (1)

INHALATION

Ethylene Glycol: Rats, rabbits, mice, dogs and monkeys exposed continuously to air saturated with ethylene glycol (66 ppm, 167 mg/m³, purity not reported) for 3 weeks had no toxic or behavioural effects. (1)

SKIN CONTACT

Ethylene Glycol: Application of 11-2784 mg/kg/day ethylene glycol (purity not reported) for 30 days (1 hour/day) caused non-dose-related mortality and degeneration of renal tubules in rabbits (3-6/group) at almost all doses. This study is limited by low numbers of animals/group (usually 3) and poor reporting. (1)

INGESTION

Ethylene Glycol: In LD₅₀ studies, the toxic effects from ethylene glycol included weakness, muscular incoordination, coma and death. (1)

Effects of Long-Term (Chronic) Exposure

INHALATION

Ethylene Glycol: Rats, guinea pigs, rabbits, squirrel monkeys and dogs were exposed to 4 or 23 ppm ethylene glycol vapour (cited as 10 or 57 mg/m³; reagent grade) for 6 weeks (8 hours/day, 5 days/week). (1)

INGESTION

Ethylene Glycol: Male Wistar rats were fed diets with 0, 50, 150, 300 or 400 mg/kg/day ethylene glycol (99.4% pure) for up to 12 months. (Wistar rats are at increased risk for accumulating oxalate crystals and developing kidney injury from ethylene glycol exposure.) There were no treatment related clinical signs at 50 or 150 mg/kg/day. Mortality occurred in 5/20 rats exposed to 300 mg/kg/day and 4/20 rats exposed to 400 mg/kg/day, with the remaining rats exposed to 400 mg/kg/day euthanized early due to excessive weight loss. An increased incidence of calcium oxalate crystals in the urine was observed in the 50 and 150 mg/kg/day groups, but there were no signs of kidney or bladder injury. Significant kidney and/or bladder damage was observed in animals exposed to 300 or 400 mg/kg/day. (1)

CARCINOGENICITY

Ethylene Glycol: The information located does not indicate that ethylene glycol is a carcinogen. (1)

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

Ethylene Glycol: In well-conducted studies, embryotoxicity (late resorptions), fetotoxicity (reduced fetal body weight) and teratogenicity (external, soft tissue and skeletal defects) have been observed in rats and mice exposed to high oral doses that caused no or minimal maternal toxicity. The US National Toxicology Program-Center for the evaluation of Risks to Human Reproduction (NTP-CERHR) has also concluded that oral exposure to high doses of ethylene glycol causes developmental toxicity in rats and mice. (1)

REPRODUCTIVE TOXICITY

Ethylene Glycol: Ethylene glycol is not a reproductive toxin. (1)

MUTAGENICITY

Ethylene Glycol: The information located does not indicate that ethylene glycol is mutagenic. (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: Not regulated.

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
Physical hazard	0	Instability	0
Protective equipment	B	Specific hazard	-

SECTION XVI: OTHER INFORMATION

GLOSSARY

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

References:

(1) CHEMINFO (2013) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada.

Code of MSDS: CA U DRU SS FS 006
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

Justification of the update:

- Triennial update.
- Update of data about Ethylene Glycol.

This MSDS contains all the information required by ANSI Z400.1 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, either the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy of 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:

Acrylic Asphalt Sealer 2 years:

6 23680 38135 3