



MATERIAL SAFETY DATA SHEET

CLEANER/DEGREASER

Offerte en français

HEALTH CANADA	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
Not regulated		Not regulated

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Use: Cleaner and degreaser.

Formula number: 528.1

Manufacturer:

ExpertSeal
327 9th Avenue
Richmond (Quebec) J0B 2H0
CANADA
Tel.: 819 826-1000

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

Clear colourless liquid. May be harmful if swallowed. May cause kidney or nervous system damage. Follow good industrial hygiene practice. Keep container closed. Use with adequate ventilation.

SECTION II: COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
Diethylene glycol monobutyl ether (DEGBE)	112-34-5	1-15	10 ppm	Not established
Ethylenediaminetetraacetic acid	6381-92-6	1-5	Not established	Not established

SECTION III: POTENTIAL HEALTH EFFECTS

Effects of Short-Term (Acute) Exposure

INHALATION

DEGBE: No adverse effects on humans have been reported. This material does not tend to form vapours at normal room temperatures and appears to have a low toxicity in animal tests. Therefore, no short-term health effects are expected unless the material is heated or mists are formed. In severe cases, effects might be like those described for ingestion. (1)

Ethylenediaminetetraacetic acid: Irritating to respiratory system. (2)

SKIN CONTACT

DEGBE: Slightly irritating. Can be absorbed through the skin, but exposure must be severe before health effects are expected. (1)

Ethylenediaminetetraacetic acid: Irritating to skin. (2)

EYE CONTACT

DEGBE: Liquid is moderately to severely irritating. It caused severe eye irritation in rabbit eyes. (1)

Ethylenediaminetetraacetic acid: Irritating to eyes. (2)

INGESTION

DEGBE: No cases have been reported, but early symptoms are expected to be similar to those of alcohol intoxication. Vomiting, bluish colouring of the skin (cyanosis), headache, rapid respiration and heart rate, low blood pressure, muscle tenderness, and unconsciousness may follow. Large or repeated amounts may affect kidney function. (1)

Ethylenediaminetetraacetic acid: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. (2)

Effects of Long-Term (Chronic) Exposure

SKIN

DEGBE: Can be absorbed through the skin in toxic amounts if contact is extensive and prolonged. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

CARCINOGENICITY

DEGBE: No human or animal information is available. 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 no listing for this chemical. The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.

Ethylenediaminetetraacetic acid: No known significant effects or critical hazards. (2)

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

DEGBE: No human information is available. See animal toxicity data. The available evidence suggests that most diethylene glycol ethers do not cause reproductive effects. There is some evidence that the monomethyl ether causes reproductive effects in animals. (1)

Ethylenediaminetetraacetic acid: No known significant effects or critical hazards. (2)

REPRODUCTIVE TOXICITY

DEGBE: No human information is available. There was no evidence of reduced fertility in a study with male rats. (1)

Ethylenediaminetetraacetic acid: No known significant effects or critical hazards. (2)

MUTAGENICITY

DEGBE: No human information is available. Does not appear to be mutagenic based on several tests in cultured mammalian and bacterial cells. (1)

Ethylenediaminetetraacetic acid: No known significant effects or critical hazards. (2)

POTENTIAL FOR ACCUMULATION

DEGBE: None. Ethers of diethylene glycol do not appear to be metabolized to oxalic acid. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

SECTION IV: FIRST AID MEASURES

EYE CONTACT

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

SKIN CONTACT

Wash with soap and water. Get medical attention if irritation develops.

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

INGESTION

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

SECTION V: FIRE FIGHTING MEASURES

FLASH POINT: 78°C (172°F) (closed cup) (for DEGBE)

AUTO-IGNITION TEMPERATURE: 204°C (400°F) (for DEGBE)

FLAMMABILITY LIMITS IN AIR: 0.85% - 24.6% (for DEGBE)

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Not available.

COMBUSTION PRODUCTS

CO, CO₂, other irritating toxic fumes.

FIRE FIGHTING INSTRUCTIONS

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

FIRE FIGHTING MEDIA

Use anti-alcohol or universal foam, dry chemical powder, CO₂ or sand.

SECTION VI: ACCIDENTAL RELEASE MEASURES

RELEASE OR SPILL

Stop or reduce the leak if safe to do so. Absorb with an inert dry material (earth, sand or absorbent material) and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Do not wash this product down the sewage and drainage systems or into bodies of water.

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. An appropriate temperature would be between 15°C and 25°C. Keep away from children.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

EYES: Safety glasses. Splash goggles.

BODY: No special protective clothing is required.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

HANDS: Impervious gloves.

ENGINEERING CONTROLS: Keep in a cool, well-ventilated place.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE:	Colourless
ODOUR:	Not available
ODOUR THRESHOLD:	Not available
pH (1% Soln/Water):	7.2 to 10.5
VAPOUR DENSITY (air = 1):	Not available
VAPOUR PRESSURE:	Not available
EVAPORATION RATE:	Not available
BOILING/CONDENSATION POINT:	Not available
MELTING/FREEZING POINT:	Not available
SPECIFIC GRAVITY (H₂O = 1):	1.03 ± 0.01 g/cc
SOLUBILITY:	Miscible in water
VOLATILE ORGANIC COMPOUND CONTENT (V.O.C.):	Not available
VOLATILITY:	Not available
VISCOSITY:	Not available
LogK_{ow}:	Not available

SECTION X: STABILITY AND REACTIVITY

STABILITY AND REACTIVITY: This product is stable.

CONDITIONS OF INSTABILITY: None known.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES: Reactive with oxidizing agents, strong acids and strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Not available.

HAZARDOUS POLYMERISATION: Will not occur.

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

DEGBE: (1)

LD₅₀ (oral, rat): 5 660 mg/kg

Ethylenediaminetetraacetic acid: (2)

LD₅₀ (oral, rat): 2 000 mg/kg

Effects of Short-Term (Acute) Exposure

INHALATION

DEGBE: Three rats survived a single 7-hour exposure to an atmosphere saturated with diethylene glycol monobutyl ether (DEGBE) at 100°C and then cooled to room temperature. The animals appeared normal with only a transient weight loss. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

SKIN CONTACT

DEGBE: Only slightly irritating to the skin of rabbits, even on repeated or prolonged contact. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

EYE CONTACT

DEGBE: Severe eye irritant. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

Effects of Long-Term (Chronic) Exposure

INGESTION

DEGBE: Doses of 51 to 1 830 mg/kg/day of DEGBE were fed to rats for 30 day of DEGBEs. The maximum dose having no effect was 51 mg/kg; 94 mg/kg caused a reduction in growth rate. The lowest dose causing harmful cellular changes in the liver, kidney, spleen or testes was 650 mg/kg. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

REPRODUCTIVE TOXICITY

DEGBE: Groups of 25 male rats were given 0, 250, 500, or 1 000 mg/kg orally for 60 days before mating with untreated females. There was no evidence of reduced fertility at any dose. Groups of 20 rabbits had 0, 100, 300, and 1 000 mg/kg/day applied to their skin for 4 hours/day from day 7 to 18 of pregnancy. No embryotoxic or teratogenic effects were observed. Groups of 25 male and female rats were fed 0, 250, or 1 000 mg/kg/day for 60 days (males) or 14 days (females) before mating with untreated animals. No effects on male fertility were observed. (1)

Ethylenediaminetetraacetic acid: No information available. (2)

MUTAGENICITY

DEGBE: The mutagenic effect of DEGBE was investigated in a battery of in vivo and in vitro tests. DEGBE was negative in bacterial tests using different Salmonella strains, the mouse lymphoma test and the cytogenic assay using Chinese hamster ovary cells, all with and without metabolic activation. At higher concentrations (10 µl/mL), all three tests showed positive effects. DEGBE did not induce unscheduled DNA synthesis in cultured rat cells and did not cause chromosome aberrations in cultured Chinese hamster cells with and without metabolic activation. It gave negative results in the in vivo sex-linked recessive lethal assay in Drosophila (fruit flies). (1)

Ethylenediaminetetraacetic acid: No information available. (2)

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 INFORMATION

Waste must be disposed of in accordance with federal, provincial and municipal environmental control regulations.

Consult your local or regional authorities.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated by DOT and TDG.

SECTION XV: REGULATORY INFORMATION

WHMIS: Not controlled under WHMIS (Canada).

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

TSCA: All constituents of this product are included on the Toxic Substances Control Act Inventory (TSCA – United States).

California proposition 65: None

HMIS (USA):		NFPA (USA):	
Health	1	Health	1
Flammability	1	Flammability	1
Physical hazard	0	Instability	0
Protective equipment	B	Specific hazard	-

SECTION XVI: OTHER INFORMATION

GLOSSARY

ANSI:	American National Standards Institute
CAS:	Chemical Abstract Services
CSA:	Canadian Standardisation Association
DOT:	Department of Transportation
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
RCRA:	Resource Conservation and Recovery Act (United States)
TDG:	Transportation of Dangerous Goods (Canada)
TLV-TWA:	Threshold Limit Value – Time-weighted Average
WHMIS:	Workplace Hazardous Materials Information System (Canada)

References:

- (1) CHEMINFO (2009) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada
- (2) Manufacturer's MSDS

Code of MSDS: CA U DRU SS FS 131
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:

- Formula modification

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, neither 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 Code:

Cleaner/Degreaser: 6 23680 50005 1