

Safety Data Sheet

CATALYS

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

COMMERCIAL NAME : UNIVERSAL EXTENDED LIFE COOLANT 50/50 YELLOW

Product Number(s): 990729

Product Use: Extended life Antifreeze /coolant for automotive and heavy-duty applications

Company Identification

Crevier Lubrifiants Inc.
2025 rue Lucien Thimens
Ville St-Laurent, Québec H4R 1K8
Canada

In case of emergency, please contact Crevier Lubrifiants Inc at :

Tel : 514-331-2951 or 1-800-363-0590

Product Information

Product Information: 514-331-2951

MSDS Requests: 514-331-2951

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or the Mixture

GHS Rating(s) :

Health : Target organ toxicant (repeated exposure) : Category 2

Reproductive toxicant (developmental) : Category 2

2.2 Label Elements :



Signal Word : Warning

Hazard statements : H361 - Suspected of damaging the unborn child

Target Organs:

H373 – May cause damage to organs (Kidney) through prolonged or repeated exposure

PRECAUTIONARY STATEMENTS:

Prévention:

P202 – Do not handle until all safety precautions have been read and understood.

P201 – Obtain special instructions before use.

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Response :

P314 – Get medical advice/attention if you feel unwell

P308 + P313 – If exposed or concerned: Get medical advice/attention.

Storage:

P405 – Store locked up.

Disposal:

P501 - Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS		
COMPONENTS	CAS NUMBER	AMOUNT
Ethylene glycol	107-21-1	40 – 60 % weight

Information on ingredients that are considered Controlled Products and/or that appear on the WHMIS Ingredient Disclosure List (IDL) is provided as required by the Canadian Hazardous Products Act (HPA, Sections 13 and 14). Ingredients considered hazardous under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, are also listed. See Section 15 for additional regulatory information.

SECTION 4 - FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: May be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Breathing this material at concentrations above the recommended exposure limits may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

DELAYED OR OTHER HEALTH EFFECTS: Reproduction and Birth Defects: Contains material that may cause harm to the unborn child if swallowed based on animal data.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Procedures: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Sodium

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities as appropriate or required.

SECTION 7 - HANDLING AND STORAGE

General Handling Information: Do not taste or swallow antifreeze or solution. Keep out of the reach of children and animals. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe vapor or fumes. Wash thoroughly after handling. Keep out of the reach of children.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of

ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

Storage: Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container tightly closed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use in a well-ventilated area. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Natural rubber, Neoprene, Nitrile Rubber, Polyvinyl Chloride (PVC or Vinyl).

Respiratory Protection: Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Country/ Agency	TWA	STEL	Ceiling	Notation
Ethylene glycol	ACGIH	---	---	100 mg/m ³	---

NOTE ON OCCUPATIONAL EXPOSURE LIMITS: Consult local authorities for acceptable provincial values in Canada. Consult the Canadian Standards Association Standard Z94.4-2011 Selection, Use and Care of Respirators.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Yellow

Physical State: Liquid

Odor: Mild

pH: 10,5

Vapor Pressure: No Data Available

Vapor Density (Air = 1): No Data Available

Initial Boiling Point: 109 °C (228,2°F)

Solubility: Soluble in water

Freezing Point: -37 °C (-34,6°F)

Melting Point: No Data Available

Specific Gravity: >1 kg/l

Density: 1,06 kg/l @ 15,6°C (60,1°F)

Viscosity: No Data Available

Evaporation Rate: No Data Available

Odor Threshold: No Data Available

Coefficient of Water/Oil Distribution: No Data Available

FLAMMABLE PROPERTIES:

Flashpoint: Not applicable

Autoignition: No Data Available

Flammability (Explosive) Limits (% by volume in air): Lower: Not applicable
Upper: Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Reactions/ Decomposition Products: Carbon oxides, Aldehydes (Elevated temperatures), Ketones (Elevated temperatures).

Hazardous Polymerization: Hazardous polymerization will not occur.

Sensitivity to Mechanical Impact: No.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on toxicological effects

General information:

Based on data on the components and the toxicology of similar materials

Route of entry:

Skin, Eyes, Ingestion, and Inhalation.

ACUTE EXPOSURE:

Inhalation: At room temperature, exposure to vapors is minimal due to low volatility. Mists may cause irritation of the upper respiratory tract. In the presence of good ventilation, a single exposure should not cause harmful effects. If the product is heated or the premises are poorly ventilated, vapors or mists may accumulate and cause respiratory irritation as well as symptoms such as headache and nausea.

Eye irritation: Corneal lesions are unlikely. Vapors or mists may cause eye irritation.

Skin irritation: Repeated exposure to large amounts of product may result in the absorption of harmful amounts. Massive contact with damaged skin or material hot enough to burn skin and may cause the absorption of lethal quantities. Prolonged contact may cause mild skin irritation with local redness. Repeated contact may cause skin irritation with localized redness. Essentially, brief contact does not cause skin irritation.

Ingestion : May be fatal if swallowed. May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, general malaise, blurred vision, irritability, lumbar pain, oliguria, uremia and central nervous system effects including irregular eye movements, convulsions and coma. Heart failure, pulmonary edema and severe kidney damage may also occur.

Information on toxicological effects

Symptoms: Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material. Repeated inhalation of ethylene glycol may produce signs of central nervous system involvement, particularly dizziness and nystagmus (involuntary eye movement). Exposure may place individuals with existing heart problems at added risk of potential cardiac irregularities and heart failure. In animals, effects have been reported on the following organs: Kidney, liver.

Acute dermal toxicity:

The following values are calculated from chapter 3.1 of the GHS document.

ATEmix (oral) 505.00 mg/kg

ATEmix (dermal) 10,707.00 mg/kg

Unknown Acute Toxicity No Data Available

Component	DL50 (oral)	DL50 (Dermal)	CDL50 (inhalation)
Ethylene glycol (107-21-1)	4700 mg/kg (Rat)	10600 mg/kg (Rat)	Not available

Respiratory or skin sensitization: No Data Available.

Mutagenicity: No Data Available

Carcinogenicity: No Data Available

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Based on animal studies, ingestion of very large amounts of ethylene glycol appears to be the major and possibly only route of exposure to produce birth defects. Exposures by inhalation or skin contact, the primary routes of occupational exposure, had minimal effect on the fetus, in animal studies. Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. The no-effect doses for developmental toxicity for ethylene glycol given by gavage over the period of organogenesis

has been shown to be 150 mg/kg/day for the mouse and 500 mg/kg/day for the rat. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations of 150, 1000 and 2500 mg/m³ for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentration, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1000 and 2500 mg/m³) and developmental toxicity with minimal evidence of teratogenicity (2500 mg/m³). The no-effects concentration (based on maternal toxicity) was 500 mg/m³. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen. There is currently no available information to suggest that ethylene glycol has caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity. Exposure to high aerosol concentrations is only minimally effective in producing developmental toxicity. Ingestion of large amounts of ethylene glycol has been shown to interfere with reproduction in animals. Specifically, growth retardation and decreased litter size in rats and mice and decreased mating frequency in mice were observed.

Specific Target Organ Toxicity - Single Exposure: No data available.

Specific Target Organ Toxicity - Repeated Exposure: May causes damage to organs through prolonged or repeated exposure if swallowed.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

MOBILITY: No data available.

PERSISTENCE AND DEGRADABILITY: This material is expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material. The product has not been tested. The statement has been derived from the properties of the individual components.

POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Octanol/Water Partition Coefficient: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 - TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

TC Shipping Description: ETHYLENE GLYCOL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER TDG REGULATIONS

DOT Shipping Description: ETHYLENE GLYCOL; NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

IMO/IMDG Shipping Description: ETHYLENE GLYCOL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER IMDG CODE

SECTION 15 - REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1
01-2A=IARC Group 2A
01-2B=IARC Group 2B
35=WHMIS IDL

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: DSL (Canada), TSCA (United States).

SECTION 16 - OTHER INFORMATION

SDS PREPARATION:

Prepared by Robert Maillette, Chemist

Date: June 27, 2019

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number	NFPA - National Fire Protection Association (USA)
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Material Safety Data Sheet
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.