



SAFETY DATA SHEET

CO00459
ECONOSOLVE LO V1.2

Preparation Date: 04/Dec/2019

Version: 3

1. IDENTIFICATION

Product identifier

Product Name ECONOSOLVE LO V1.2

Other means of identification

SDS Number CO00459

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Industrial degreaser.

Restricted Uses No information available

Initial Supplier Identifier

Relay Distributing
6005 50th Avenue
Lloydminster, Saskatchewan
S9V 2A4
Telephone: 1-306-825-4322

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Flammable liquids	Category 4
Serious eye damage/eye irritation	Category 2A
Aspiration toxicity	Category 1

Label elements

Hazard pictograms



Signal Word: Danger

Hazard statements

Combustible liquid
 Causes serious eye irritation
 May be fatal if swallowed and enters airways

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF SWALLOWED: Immediately call a POISON CENTER or doctor
 Do NOT induce vomiting

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

May be harmful in contact with skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-% (W/W)	Synonyms
Distillates (petroleum), Hydrotreated Light	64742-47-8	60 - 70%	Distillates (petroleum), Hydrotreated Light
Butyl Carbitol	112-34-5	30 - 40%	Butyl Carbitol
Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphen	127087-87-0	0 - 10%	Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphen

yl)-omega-hydroxy-,branched			yl)-omega-hydroxy-,branched
Polyethylene glycol	25322-68-3	0 - 10%	Polyethylene glycol
Dinonylphenyl polyoxyethylene	9014-93-1	0 - 10%	Dinonylphenyl polyoxyethylene

4. FIRST AID MEASURES

Description of first aid measures

General advice

IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact

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

Ingestion

ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed:

Prolonged or repeated contact may cause discomfort and local redness. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva. High vapor/aerosol concentrations (attainable at elevated temperatures well above ambient) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury.

Indication of any immediate medical attention and special treatment needed:

Note to physicians

Treatment based on sound judgment of physician and individual reactions of patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (e.g. gastric lavage after endotracheal intubation). Exposed person should be observed for 24 - 48 hours for delayed onset of pulmonary edema. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog or fine spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Do not use direct water stream, which will spread fire.

Specific hazards arising from the substance or mixture

Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode. Use water spray to cool fire-exposed containers and structures. Isolate and restrict area access. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Container may rupture from gas generation in a fire situation. Fight fire from a safe distance and from a protected location. Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. Combustible liquid. This liquid is volatile and gives off invisible vapors. Shut off fuel to fire. This material may produce a floating fire hazard in extreme fire conditions.

Hazardous combustion products

Carbon monoxide. Carbon dioxide. Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials. Hazardous decomposition products may include and are not limited to : aldehydes, ketones, organic acids.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. DO NOT handle or store near an open flame, heat, or other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. DO NOT pressurize, cut, heat, or weld containers. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

Conditions for safe storage, including any incompatibilities

Store at ambient temperature. Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in accordance with good industrial practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Distillates (petroleum), Hydrotreated Light 64742-47-8	Not available	TWA: 200 mg/m ³ Skin	Not available	Not available	Not available	Not available
Butyl Carbitol 112-34-5	Not available	Not available	TWA: 10 ppm	Not available	10 ppm TLV-TWA	Not available
Poly(oxy-1,2-ethane diyl),alpha-(4-nonylp henyl)-omega-hydro xy-,branched 127087-87-0	Not available	Not available	Not available	Not available	Not available	Not available
Polyethylene glycol 25322-68-3	Not available	Not available	Not available	Not available	Not available	Not available
Dinonylphenyl polyoxyethylene 9014-93-1	Not available	Not available	Not available	Not available	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls

Electrical and mechanical equipment should be explosion proof. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical safety glasses with side shields or splash proof goggles.

Hand protection

Appropriate chemical resistant gloves should be worn. Butyl rubber gloves. Nitrile gloves. Neoprene gloves. Viton gloves. Ethyl Vinyl Alcohol Laminate (EVAL). Polyvinylchloride (PVC) gloves. Polyethylene gloves. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin and body protection

Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection

If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless
Odor	Mild petroleum.
Odor threshold	No information available

PROPERTIES

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	>-50 °C / >-58 °F	
Initial boiling point/boiling range	> 190 °C / 374 °F	None known
Flash point	>62 °C / >143 °F	Closed cup. Product not tested - using lowest flashing component.
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit:	24.6	
Lower flammability limit:	0.85	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Specific Gravity	0.8560	
Water solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	>228 °C / >442 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	No information available	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability

Stable

Possibility of hazardous reactions

No additional remark.

Hazardous polymerization

Will not occur.

Conditions to avoid

Avoid any source of ignition.

Incompatible materials

Strong bases. Strong oxidizing agents. Strong acids. Materials reactive with hydroxyl compounds.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials. Hazardous decomposition products may include and are not limited to : aldehydes, ketones, organic acids.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Inhalation**

High vapor/aerosol concentrations (attainable at elevated temperatures well above ambient) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects.

Eye contact

Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva.

Skin contact

Prolonged or repeated contact may cause discomfort and local redness. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

Ingestion

Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury.

Information on toxicological effects**Symptoms**

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Significant Data with Possible Relevance to Humans: In two-year feeding studies, the 4-mole ethoxylate of nonylphenol (NPE4) at doses of 200 mg/kg/day or 40 mg/kg/day in rats and dogs, respectively, produced no significant effects. The 9-mole ethoxylate (NPE9) at doses of 140 or 30 mg/kg/day in the diet of rats or dogs, respectively, produced no adverse effects. Parameters evaluated included body and organ weights and histopathology of 28 tissues. A dose of 1000 mg/kg/day of NPE9 resulted in reduced body weights and enlarged livers in rats and reduced weight, emesis, and minimal blood changes in dogs. A dose of 88 mg/kg/day NPE9 produced increased liver to body weight ratios in dogs which was attributed to decreased food consumption. Rats fed dietary concentrations of a related alkylphenol ethoxylate, the 40-mole ethoxylate of octylphenol (OPE40), up to 14000 ppm (700 mg/kg/day) for two years showed no adverse effects on growth or survival, feed consumption, hematologic values, urine measurements, organ weights or histopathologic lesions. In animals, effects have been reported on the following organs: Blood. Kidney. Liver. At very high oral doses, this product caused reversible damage to the stomach, liver, and kidney (male only) of rats. These effects are not relevant to humans at occupational levels of exposure.

Numerical measures of toxicity**Acute toxicity**

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

ATEmix (oral) 5,784.00 mg/kg

ATEmix (dermal) 2,148.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), Hydrotreated Light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Butyl Carbitol 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	Not available
Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphenyl)-omega-hydroxy-,branched 127087-87-0	= 1310 mg/kg (Rat) = 2590 mg/kg (Rat)	= 1780 µL/kg (Rabbit) = 2 mL/kg (Rabbit)	Not available
Polyethylene glycol 25322-68-3	= 22 g/kg (Rat) = 28 g/kg (Rat)	> 20 g/kg (Rabbit)	Not available
Dinonylphenyl polyoxyethylene 9014-93-1	Not available	Not available	Not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Prolonged or repeated contact may cause discomfort and local redness. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

Serious eye damage/eye irritation

Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Distillates (petroleum), Hydrotreated Light 64742-47-8	Not available	Not available	Not available	Not available
Butyl Carbitol 112-34-5	Not available	Not available	Not available	Not available
Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphenyl)-omega-hydroxy-,branched 127087-87-0	Not available	Not available	Not available	Not available
Polyethylene glycol 25322-68-3	Not available	Not available	Not available	Not available
Dinonylphenyl polyoxyethylene 9014-93-1	Not available	Not available	Not available	Not available

Reproductive toxicity

No information available.

Specific target organ systemic toxicity - single exposure

No information available.

Specific target organ systemic toxicity - repeated exposure

No information available.

Aspiration hazard

May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Distillates (petroleum), Hydrotreated Light 64742-47-8	Not available	2.2 mg/L LC50 (Lepomis macrochirus) 96 h static 2.4 mg/L LC50 (Oncorhynchus mykiss) 96 h static 45 mg/L LC50 (Pimephales promelas) 96 h flow-through	Not available	LC50: =4720mg/L (96h, Den-dronereides heteropoda)
Butyl Carbitol 112-34-5	100 mg/L EC50 Desmodesmus subspicatus 96 h	1300 mg/L LC50 (Lepomis macrochirus) 96 h static	Not available	EC50: =2850mg/L (24h, Daphnia magna) EC50: >100mg/L (48h, Daphnia magna)
Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched 127087-87-0	Not available	Not available	Not available	Not available
Polyethylene glycol 25322-68-3	Not available	5000 mg/L LC50 (Carassius auratus) 24 h	Not available	Not available
Dinonylphenyl polyoxyethylene 9014-93-1	Not available	Not available	Not available	Not available

Persistence and degradability No information available.

Bioaccumulation No information available.

Chemical Name	Partition coefficient
Distillates (petroleum), Hydrotreated Light 64742-47-8	Not available
Butyl Carbitol 112-34-5	Not available
Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched 127087-87-0	Not available
Polyethylene glycol 25322-68-3	Not available
Dinonylphenyl polyoxyethylene 9014-93-1	Not available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available.

DOT (U.S.)

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Distillates (petroleum), Hydrotreated Light - 64742-47-8	Not Listed	Not Listed	Not Listed
Butyl Carbitol - 112-34-5	Not Listed	Not Listed	Listed
Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphenyl)-omega-hydroxy-,branched - 127087-87-0	Not Listed	Not Listed	Listed
Polyethylene glycol - 25322-68-3	Not Listed	Not Listed	Not Listed
Dinonylphenyl polyoxyethylene - 9014-93-1	Not Listed	Not Listed	Not Listed

International Inventories

TSCA

All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

DSL/NDSL

All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION

<u>NFPA:</u>	Health hazards 2	Flammability 0	Instability 0	Physical and chemical properties - Personal protection X
<u>HMIS:</u>	Health hazards 2	Flammability 0	Physical hazards 0	

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Relay Distributing.

Preparation Date: 04/Dec/2019

Revision Date: 04/Dec/2019

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End of Safety Data Sheet