



RPOE 100

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity RPOE 100
Alternate Names RPOE-100

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Lubricant, Compressor Lubricant , Refrigeration Lubricant
Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name BVA Inc.
29222 Trident Industrial. Blvd.
New Hudson, MI 48165 USA

Emergency

24 hour Emergency Telephone No. USA – Chemtrec: 800-424-9300 All Others – Chemtrec:
+1-703-527-3887
Customer Service: BVA Inc. +1-248-348-4920

2. Hazard identification of the product

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements



3. Composition/information on ingredients

No ingredients in this product are classified as hazardous.

INGREDIENT COMMENTS This proprietary mixture contains no Hazardous Ingredients (2001/58/EC) If no EU or no CAS numbers are given for classified components the raw material supplier has applied for / will apply for exemption, have not sent the complete information yet , or there could be no obligation to give the EU or CAS numbers.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean fresh water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	First aid is normally not required. Seek medical attention if discomfort occurs.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Note : This information is based on test data from similar products. Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage. Not likely to be absorbed through skin. Injection may cause diarrhea.
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5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO², powder, water spray.
Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Smoke, Fume, Carbon Monoxide, Aldehydes

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from firefighting to enter drains or water courses.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or watercourses.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

7. Handling and storage

7.1. Precautions for safe handling

Prevent small spills and leakage to avoid slip hazard. Static Accumulator: This material is a static accumulator. See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Do not store in open or unlabeled containers.

Incompatible materials: Avoid contact with ignition sources and strong oxidizers.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.



8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
Proprietary	Polyol Ester made with straight and branched fatty acids Mixed Carboxylic Esters (lubricant)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingestion	Source	Value
Proprietary	Polyol Ester made with straight and branched fatty acids Mixed Carboxylic Esters (lubricant)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

If contact is likely, safety glasses with side shields are recommended.

Skin

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. No protection is ordinarily required under normal conditions of use.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:



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9. Physical and chemical properties

Appearance	Clear to pale yellow Liquid
Odor	Characteristic
Odor threshold	Not Measured
pH	Not technically feasible
Melting point / freezing point	Not Measured
Initial boiling point and boiling range, °C (°F)	>250 (482)
Flash Point ASTM D-92, °C (°F)	>255 (492)
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	<0.013 kPa(0.1 mm Hg) at 20 C
Vapor Density	Not Measured
Density 20°C gms/cm	0.955 – 0.965
Solubility in Water	Not Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity cSt (mm²/sec) at 40°C	100 +/-10%
VOC %	Not Measured
Pour point, °C (°F)	-33 (-27)

9.2. Other information**10. Stability and reactivity****10.1. Reactivity**

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Avoid contact with ignition sources and strong oxidizers.

10.6. Hazardous decomposition products

Smoke, Fume, Carbon Monoxide, Aldehydes



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11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Polyol Ester made with straight and branched fatty acids Mixed Carboxylic Esters (lubricant) - (Proprietary)	>2,000.00, Rat - Category: 5	>2,000.00, Rat - Category: 5	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Item	Category	Hazard
Acute Toxicity (mouth)	---	Not Applicable
Acute Toxicity (skin)	---	Not Applicable
Acute Toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Eye damage/irritation	---	Not Applicable
Sensitization (respiratory)	---	Not Applicable
Sensitization (skin)	---	Not Applicable
Germ toxicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive Toxicity	---	Not Applicable
Specific target organ systemic toxicity (single exposure)	---	Not Applicable
Specific target organ systemic Toxicity (repeated exposure)	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Environmental Fate & Distribution: Essentially insoluble in water.

Persistence & Degradation Toxicity: Inherent Biodegradability

Effect on Effluent Treatment: Product is partially removed in biological treatment processes.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l



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Polyol Ester made with straight and branched fatty acids Mixed Carboxylic Esters (lubricant) - (Proprietary)	5,000.00, Fish (Piscis)	Not Available	Not Available
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12.2. Persistence and degradability

Base oil component -- Expected to be inherently biodegradable

12.3. Bioaccumulative potential

The potential for bioaccumulation seems negligible base on data from other similar material and the biodegradability, it is unlikely to breakdown or remain in the air, but rather become adsorbed to the soil and sediments and thus not be available to biota.

12.4. Mobility in soil

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Container Warnings: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAMES, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE OR CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration Regulations, ANSI Z49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations.

14. Transport information

- 14.1. UN number Not Applicable
- 14.2. UN proper shipping name Not Regulated
- 14.3. Transport hazard class(es)

DOT (Domestic Surface Transportation)

IMO / IMDG (Ocean Transportation) /
ICAO/IATA



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DOT Proper Shipping Name Not Regulated
DOT Hazard Class Not Applicable
DOT Label ---
UN / NA Number Not Applicable
DOT Packing Group Not Applicable
CERCLA/DOT RQ NA gal. / NA lbs.

IMDG Proper Shipping Name Not Regulated
IMDG Hazard Class Sub Class Not Applicable
IMDG Packing Group Not Applicable
ICAO/IATA Proper Shipping Name Not Regulated
Air Class Not Applicable

14.4. Packing group Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.

WHMIS Classification Not Regulated

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): No

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

(No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous :

(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

(No Product Ingredients Listed)

Proposition 65 - Carcinogens (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):



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(No Product Ingredients Listed)

N.J. RTK Substances (>1%) :

(No Product Ingredients Listed)

Penn RTK Substances (>1%) :

(No Product Ingredients Listed)

16. Other information

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The full text of the phrases appearing in section 3 is:

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