

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006
PRECISION™ SYNTHETIC EMB



000003000017

Version 4.0

Revision Date 2015/03/02

Print Date 2015/03/02

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : PRECISION™ SYNTHETIC EMB
Product code : PSEMB, PSEMBC30

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

Use of the Substance/Mixture : A premium synthetic non-EP grease designed to lubricate bearings over a wide temperature range in applications where shock loading is absent and extreme pressure (EP) grease is not required.

1.3 Details of the supplier of the safety data sheet

Manufacturer or supplier's details
Petro-Canada Europe Lubricants Limited
Wellington House, Starley Way
Birmingham International Park Solihull B37 7HB
United Kingdom

E-mail address of person responsible for the SDS : EUSDS@suncor.com

1.4 Emergency telephone number

Emergency telephone number : Suncor Energy: +1 403-296-3000;
Poison Control Centre: Consult local telephone directory for emergency number(s).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements	:	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P273 Disposal: P501	Avoid release to the environment. Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling:

EUH208 May produce an allergic reaction.

Contains: 2,5-bis(octyldithio)-1,3,4-thiadiazole and Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0 276-737-9 01- 2119474878- 16-0001		Asp. Tox. 1;	20 - 30
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1 270-128-1	R52/53	Aquatic Chronic 3; H412	2.5 - 10
Phenol, isobutyleneated, phosphate (3:1)	68937-40-6 273-065-8	N; R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	0.25 - 1
2,5-bis(octyldithio)-1,3,4-thiadiazole	13539-13-4 236-912-2	Xi; R43	Acute Tox. 4; H332 Skin Sens. 1; H317 Skin irr/cor. 2; H315 Eye irr/damage 2; H319	0.1 - 1
Propanoic acid, 3-	268567-32-4	Xi; R41-R43-	Skin Sens. 1B;	0.1 - 0.25

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[[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	434-070-2	R52/53	H317 Eye irr/damage 1; H318 Aquatic Chronic 3; H412	
triphenyl phosphate	115-86-6 204-112-2	N; R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	0.1 - 0.25

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled	: Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.
In case of skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash contaminated clothing before reuse. Seek medical advice. In the event of a known, or potential, high pressure injection injury, worker should obtain immediate medical evaluation.
In case of eye contact	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	: Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Risks	: First aider needs to protect himself.
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4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Cool closed containers exposed to fire with water spray.

Hazardous combustion products : Carbon oxides (CO, CO₂), nitrogen oxides (NO_x), sulphur oxides (SO_x), phosphorus oxides (PO_x), hydrocarbons, aldehydes, smoke and irritating vapours as products of incomplete combustion.

5.3 Advice for firefighters

Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used.

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Ensure adequate ventilation.
Contact the proper local authorities.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Keep container closed when not in use.
Advice on protection against fire and explosion	: None known.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	: Store in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight.
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7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
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Hand protection

Material

Remarks

: neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R).
: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Skin and body protection

: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection

: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type

: organic vapour filter

Protective measures

: Wash contaminated clothing before re-use.
No special protective equipment required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Buttery, smooth, semi-solid

Colour : tan

Odour : Mild grease like.

Odour Threshold : No data available

pH : No data available

Pour point : -51 °C (-60 °F)Base Fluid Blend

Boiling point/boiling range : No data available

Flash point : 195 °C (383 °F)
Method: Cleveland open cup
Remarks: Base Fluid Blend

Fire Point : 211 °C (412 °F)
Base Fluid Blend

Auto-Ignition Temperature : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Low fire hazard. This material must be heated before ignition will occur.

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 0.8906 kg/l (15 °C / 59 °F)
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 114.3 cSt (40 °C / 104 °F) Base Fluid Blend 15.6 cSt (100 °C / 212 °F) Base Fluid Blend
Explosive properties	: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

Hazardous reactions : Hazardous polymerisation does not occur.
Stable under normal conditions.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Reactive with oxidising agents, acids, alkalis, acidic clay and reducing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products : May release CO_x, NO_x, SO_x, PO_x, hydrocarbons, aldehydes, metal oxides, lithium compounds, smoke and irritating vapours when heated to decomposition.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:

lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based:

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg,

Acute inhalation toxicity : LC50 Rat: > 5.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Rabbit: > 2,000 mg/kg,

triphenyl phosphate:

Acute oral toxicity : LD50 Rat: 3,500 mg/kg,

LD50 Mouse: 1,320 mg/kg,

Acute dermal toxicity : LD50 Rabbit: > 7,900 mg/kg,

Skin corrosion/irritation

Product:

Remarks: No data available

Components:

lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based:

Result: No skin irritation

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Serious eye damage/eye irritation

Product:

Remarks: No data available

Components:

lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based:

Result: No eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Remarks: No data available

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12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

SECTION 14: Transport information

International Regulation

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

49 CFR

Not regulated as a dangerous good

TDG

Not regulated as a dangerous good

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Special precautions for user

Not applicable

SECTION 15: Regulatory information

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

Water contaminating class : WGK 1 slightly water endangering
(Germany)

The components of this product are reported in the following inventories:

TSCA	: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
DSL	: On the inventory, or in compliance with the inventory
ELINCS	: On the inventory, or in compliance with the inventory

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of R-Phrases

R41	: Risk of serious damage to eyes.
R43	: May cause sensitisation by skin contact.
R50/53	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements

H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Asp. Tox.	: Aspiration hazard
Eye irr/damage	: Serious eye damage/eye irritation
Skin irr/cor.	: Skin corrosion/irritation

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Skin Sens. : Skin sensitisation

For Copy of (M)SDS : Internet: lubricants.petro-canada.ca/msds
Europe, telephone: 00-800-7387-6000
For Product Safety Information: 1 905-804-4752

Prepared by : Product Safety: +1 905-804-4752

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