



SAFETY DATA SHEET

Transmission oil
31367940

Date of issue : 12/16/2014.

Version : 1

Section 1. Identification

1.1 Product identifier

Product name : Transmission oil
Product no. : 31367940
Product type : Liquid.

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

Product use : Transmission oil

1.3 Details of the supplier of the safety data sheet

Supplier's details : Volvo Car Customer Service
SE 405 31 Göteborg
Sweden

Telephone no. : +46-31-66 67 50

1.4 Emergency telephone number

Emergency phone : +46-31-66 67 50 (during office hours)

E-mail address : sds@volvo.com
websds.volvo.com

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See section 11 for toxicological information and section 12 for ecotoxicological information.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Not applicable.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains C14-18 alpha-olefin epoxide, reaction products with boric acid. May produce an allergic reaction. Safety data sheet available on request. Keep out of reach of children. If ingested, do not induce vomiting. Seek medical advice immediately. Minimise skin contact. Protect the environment. Dispose of used oil at designated sites. Do not mix used oil with solvents, brake fluids or coolants.

2.3 Other hazards

Other hazards which do not result in classification : Defatting to the skin.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

EC number : Mixture.

Product code : 31367940

Section 3. Composition/information on ingredients

Ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Mineral Oil, Solvent refined	-	60 - 100	Not classified.	Not classified.	[5]
Zinc	EC: 224-235-5	1 - 5	Xi; R41	Eye Dam. 1, H318	[1]
Dialkyldithiophosphate	CAS: 4259-15-8		N; R51/53	Aquatic Chronic 2, H411	
C14-18 alpha-olefin epoxide, reaction products with boric acid	-	0 - 1	R43	Skin Sens. 1, H317	[1]
			See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.	

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

4.1 Description of first aid measures

- Inhalation** : If inhaled, remove to fresh air.
- Skin contact** : Wash contaminated skin with soap and water.
- Eye contact** : In case of contact with eyes, rinse immediately with plenty of water.
- Ingestion** : If ingested, do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Inhalation** : Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation. Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
- Skin contact** : Defatting to the skin.
- Eye contact** : May cause slight transient irritation.
- Ingestion** : Ingestion may cause gastrointestinal irritation and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
- Skin** : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
- Eyes** : May cause slight transient irritation. (redness)
- Ingestion** : Ingestion may cause gastrointestinal irritation and diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

- Specific treatments** : No specific treatment.
- Notes to physician** : Treat symptomatically.
- Protection of first-aiders** : Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

- Suitable** : Recommended:, alcohol-resistant foam, CO₂, powders
- Not suitable** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
sulfur oxides
phosphorus oxides
carbon oxides

Section 5. Fire-fighting measures

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Refer to protective measures listed in sections 7 and 8.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Spill : Stop leak if without risk. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reuse.

Advice on general occupational hygiene : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities : Do not store in unlabelled containers. Keep container tightly closed. Keep container in a cool, well-ventilated area.

7.3 Specific end use(s)

Recommendations : Transmission oil

Industrial sector specific solutions : Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name

Occupational exposure limits

No exposure limit value known.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Environmental exposure controls : Do not allow to enter drains or watercourses.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection : Provide adequate ventilation.

Hand protection : For prolonged or repeated handling, use gloves : nitrile rubber

Section 8. Exposure controls/personal protection

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Brownish
Odour	: Oil Faint odour.
Odour threshold	: Not available.
pH	: Not applicable.
Melting point	: Not available.
Pour point	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: 208°C (406,4°F) [ISO 2592]
Burning time	: Not applicable.
Burning rate	: Not applicable.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapour pressure	: <0,01 kPa (<0,075 mm Hg) [room temperature]
Solubility	: Partially soluble in the following materials: n-octanol. Very slightly soluble in the following materials: cold water and hot water.
Vapour density	: Not available.
Density	: 0,866 g/cm ³ [15°C]
Relative density	: 0,866
Partition coefficient: n-octanol/water	: >3
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0,285 cm ² /s (28,5 cSt)
Molecular weight	: Not applicable.

9.2 Other information

SADT : Not available.

Section 10. Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

11.1 Information on toxicological effects

A. Information on the likely routes of exposure

Potential acute health effects

Inhalation	: Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation. Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
Skin contact	: Defatting to the skin.
Eye contact	: May cause slight transient irritation.
Ingestion	: Ingestion may cause gastrointestinal irritation and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
Skin	: Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

Section 11. Toxicological information

- Eyes** : May cause slight transient irritation. (redness)
Ingestion : Ingestion may cause gastrointestinal irritation and diarrhoea.

Relevant information for the mixture and/or the ingredients is presented below.

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Zinc Dialkyldithiophosphate	LD50 Oral	Rat	3100 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Dialkyldithiophosphate	Eyes - Irritant		-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
C14-18 alpha-olefin epoxide, reaction products with boric acid	skin	-	Sensitising

- General** : Contains small percentage of substances which can cause allergic reactions. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

- Mutagenicity** : Not applicable

- Other information** : Not available.

Section 12. Ecological information

12.1 Toxicity

- A. Ecotoxicity** : Ecotoxicological data on the substances included in this product show that the product is not classified as harmful to the environment. This product shows a low bioaccumulation potential.

Relevant information for the mixture and/or the ingredients is presented below.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Zinc Dialkyldithiophosphate	Acute EC50 1 to 1,5 mg/l	Daphnia	48 hours

B. Persistence/degradability

12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Zinc Dialkyldithiophosphate	-	-	Not readily

C. Bioaccumulative potential

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc Dialkyldithiophosphate	3,59	91,2	low

D. Mobility in soil

12.4 Mobility in soil

- Soil/water partition coefficient (K_{oc})** : Not available.

- Mobility** : Non water-soluble liquid This product is not likely to volatilise rapidly into the air because of its low vapour pressure.

12.5 Results of PBT and vPvB assessment

- PBT** : Not applicable.
 P: Not available. B: Not available. T: Not available.

- vPvB** : Not applicable.
 vP: Not available. vB: Not available.

- 12.6 Other adverse effects** : No known significant effects or critical hazards.

Section 13. Disposal considerations

A.

13.1 Waste treatment methods

Product

Methods of disposal :

Hazardous waste :

European waste catalogue (EWC)

Waste code	Waste designation

Packaging

Methods of disposal :

Section 14. Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Other EU regulations

Product use : Consumer applications, Industrial applications, Professional applications.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

Section 16. Other information

Full text of abbreviated R phrases : R41- Risk of serious damage to eyes.
R43- May cause sensitisation by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : Xi - Irritant
N - Dangerous for the environment

Full text of abbreviated H statements : H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2
Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

History

: 12/16/2014.

Section 16. Other information

Date of issue/Date of
revision

Version : 1

Notice to reader

Conforms to 1907/2006/EC (REACH), Article 31

Indicates information that has changed from previously issued version.