

SAFETY DATA SHEET

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

1.1 Product identifier

Product name : Wet Brake Oil Volvo 97304 WB102
Product code : 15018621
Product description : Not available.
Product type : Liquid.

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

Identified uses

Lubricating grease and oil.

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

SMT GB,
Moorfield Road,
Duxford, CB22 4QX

Tel 07544 657748

e-mail address of person : sds@volvo.com
responsible for this SDS

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Call a POISON CENTER or doctor.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves and protective clothing. Avoid breathing dust/fume/gas/mist/
vapours/spray.

SECTION 2: Hazards identification

Response	: Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: Not applicable.
Supplemental label elements	: Keep out of reach of children. If ingested, do not induce vomiting. Minimise skin contact. Dispose of used oil at designated sites. Do not mix used oil with solvents, brake fluids or coolants.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
1-DECENE, TETRAMER, MIXED WITH 1-DECENE TRIMER, HYDROGENATED	CAS: 68649-12-7	≤10	Asp. Tox. 1, H304	[1]
Zinc Dialkyldithiophosphate	REACH #: 01-2119493635-27 EC: 224-235-5 CAS: 4259-15-8	≤3	Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1]
C14-18 alpha-olefin epoxide, reaction products with boric acid	REACH #: 01-2119976364-28 CAS: -	<1	Skin Sens. 1B, H317	[1]
triphenyl phosphite	EC: 202-908-4 CAS: 101-02-0	0.1 - <0.25	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 STOT RE 2, H373 (central nervous system (CNS)) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : In case of contact with eyes, rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur. Continue to rinse for at least 10 minutes.
- Inhalation** : If inhaled, remove to fresh air.
- Skin contact** : After contact with skin, wash immediately with plenty of soap and water. Remove contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.
- Ingestion** : Get medical attention. If swallowed, do not induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Refer to protective measures listed in sections 7 and 8.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Inflammation of the eye is characterised by redness, watering and itching.
- Inhalation** : Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
- Skin contact** : Skin sensitisation . Adverse symptoms may include the following: irritation , redness
- Ingestion** : Ingestion may cause gastrointestinal irritation and diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: CO₂, powders, Foam
- Unsuitable extinguishing media** : 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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
sulfur oxides
phosphorus oxides
carbon oxides

5.3 Advice for firefighters

- Special protective actions 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.
- Special protective equipment for fire-fighters** : 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** : Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

- Small 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.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid release to the environment. Avoid breathing vapour or mist. Do not get in eyes or on skin or clothing. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not ingest. Wash thoroughly after handling. Medical surveillance should be considered before handling this product.
- 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. See also Section 8 for additional information on hygiene measures.

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. Store in accordance with local regulations.

7.3 Specific end use(s)

- Recommendations** : Lubricating grease and oil.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

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. Wash contaminated clothing before reusing.

Eye/face protection : Recommended: Safety glasses.

Skin protection

Hand protection : For prolonged or repeated handling, use gloves: nitrile rubber (≥ 0.38 mm).

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Provide adequate ventilation.

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

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Amber.

Odour : Petroleum oil

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range : $>316^{\circ}\text{C}$ ($>600.8^{\circ}\text{F}$)

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Upper/lower flammability or explosive limits : Lower: 0.9%
Upper: 7%

SECTION 9: Physical and chemical properties

Flash point	: Closed cup: >200°C (>392°F) [ASTM D-92]
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: Not available.
Viscosity	: Kinematic (40°C): 42.2 mm ² /s [ASTM D 445]
Pour point	: -36°C (-32.8°F)
Solubility(ies)	:

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: >3.5
Vapour pressure	: <0.013 kPa (<0.1 mm Hg)
Relative density	: 0.86
Vapour density	: >1 [Air = 1]
Explosive properties	: Not available.
Oxidising properties	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

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	: Keep away from extreme heat.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
triphenyl phosphite	LD50 Oral	Rat	444 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
triphenyl phosphite	444	N/A	N/A	N/A	N/A

Irritation/Corrosion

SECTION 11: Toxicological information**Conclusion/Summary**

- Skin** : Based on available data, the classification criteria are not met.
Eyes : Based on available data, the classification criteria are not met.
Respiratory : Based on available data, the classification criteria are not met.

Sensitisation

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

Conclusion/Summary

- Skin** : May cause an allergic skin reaction.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Carcinogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Reproductive toxicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Teratogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
triphenyl phosphite	Category 2	-	central nervous system (CNS)

Aspiration hazard

Product/ingredient name	Result
1-DECENE, TETRAMER, MIXED WITH 1-DECENE TRIMER, HYDROGENATED	ASPIRATION HAZARD - Category 1

- Information on likely routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
Inhalation : Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.
Skin contact : May cause an allergic skin reaction. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Ingestion : Ingestion may cause gastrointestinal irritation and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Inflammation of the eye is characterised by redness, watering and itching.
Inhalation : Long term exposure to high concentrations of oil mist or vapors may cause lung damage.
Skin contact : Skin sensitisation . Adverse symptoms may include the following: irritation , redness

SECTION 11: Toxicological information

Ingestion : Ingestion may cause gastrointestinal irritation and diarrhoea.

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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : Not applicable.

Mutagenicity : Not applicable

Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

Inherently biodegradable This product shows a low bioaccumulation potential. This material is harmful to aquatic life with long lasting effects. Oils are in general persistent in the environment. Upon release the oil spreads on the soil or water surface and can affect the area for a long time.

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc Dialkyldithiophosphate	Acute NOEL 32 mg/l Chronic NOEC 0.8 mg/l	Daphnia Daphnia	-
triphenyl phosphite	Acute LC50 0.78 mg/l	Fish	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

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

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc Dialkyldithiophosphate	3.59	91.2	low
triphenyl phosphite	6.62	-	high

12.4 Mobility in soil

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

SECTION 12: Ecological information

Mobility : Non water-soluble liquid

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods**Product**

Methods of disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Hazardous waste : Yes.

Waste catalogue

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Packaging

Methods of disposal : Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	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.	No.

Additional information

ADR/RID : Not applicable

ADN : Not applicable

IMDG : Not applicable

IATA : Not applicable

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.

SECTION 14: Transport information

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/REACH**Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

☑ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = GB CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.