

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



Product name: ZF Lifeguard Hybrid 3

ZF Aftermarket

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

1.1 Product identifier

Product name: ZF Lifeguard Hybrid 3

Product number: 5961.308.374

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

Identified uses: Lubricant

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

ZF Friedrichshafen AG
ZF Aftermarket
Obere Weiden 12
97424 Schweinfurt
Germany
+49 9721 475 60
www.zf.com /contact

1.4 Emergency telephone number

24/7h Emergency telephone number (+49) 89 19 240

2. Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Aspiration Hazard

H304: May be fatal if swallowed and enters airways.

Category 1

Hazard summary

Physical Hazards

No data available.

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Health Hazards

Ingestion

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

2.2 Label Elements

Contains:

Base oil paraffinic

Hazard pictograms:



GHS 08

Signal Words:

Danger

Hazard Statement(s):

H304: May be fatal if swallowed and enters airways.

Precautionary Statements

Response:

P301+P310: IF SWALLOWED:
Immediately call a POISON
CENTER/doctor.
P331: Do NOT induce vomiting.

Disposal:

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

UFI Code:

UFI: W7S8-90DA-3003-NQ3G

2.3 Information on other hazards

By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

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Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. Composition/information on ingredients

3.1 Mixtures

General information

Mixture containing severely refined base oils and additives.

Chemical name	Identifier	Concentration *	REACH Registration No	Notes
Base oil paraffinic	EINECS: 265-157-1	50,00% - <100,00%	01-2119484627-25	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Identifier	Classification
Base oil paraffinic	EINECS: 265-157-1	CLP: Asp. Tox. 1; H304

CLP: Regulation No. 1272/2008.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Note L of Annex VI of Regulation EC 1272/2008."

4. First aid measures

General:

Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation:

Supply fresh air; consult doctor in case of symptoms.

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Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids.
Skin Contact:	Wash with soap and water.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting.
4.2 Most important symptoms and effects, both acute and delayed:	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.
4.3 Indication of any immediate medical attention and special treatment needed	Get medical attention if symptoms occur.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added.

Unsuitable extinguishing media: Water with a full water jet.

5.2 Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire fighting procedures: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated firefighting water in accordance with official regulations. Collect contaminated firefighting water separately. It must not enter drains.

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Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

- | | | |
|------------|--|--|
| 6.1 | Personal precautions, protective equipment and emergency procedures: | In case of spills, beware of slippery floors and surfaces. |
| 6.2 | Environmental Precautions: | Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water. |
| 6.3 | Methods and material for containment and cleaning up: | Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk. |
| 6.4 | Reference to other sections: | See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal. |

7. Handling and storage

- | | | |
|------------|---|---|
| 7.1 | Precautions for safe handling: | Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation. |
| 7.2 | Conditions for safe storage, including any incompatibilities: | Store locked up. Local regulations concerning handling and storage of |

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waterpolluting products have to be followed. Do not heat up to temperatures close to the flash point.

7.3 Specific end use(s): Not applicable
Storage Class: 10, Combustible liquids

8. Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits None of the components have assigned exposure limits.

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information: Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Eye/face protection: Safety glasses (EN 166) recommended during refilling. Avoid contact with skin and eyes.

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Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

Skin protection

Hand Protection:

Material: Nitrile butyl rubber (NBR).
Min. Breakthrough time: ≥ 480 min
Recommended thickness of the material: $\geq 0,38$ mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection:

Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

Thermal hazards:

Not known.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls:

No data available.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water)
Freezing point:	-45 °C
Boiling Point:	not determined
Flash Point:	202 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	not determined
Flammability Limit - Upper (%)-:	Not applicable for mixtures
Flammability Limit - Lower (%)-:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	0,83 g/ml (15,00 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	not determined
Decomposition Temperature:	not determined
Kinematic viscosity:	17,5 mm ² /s (40 °C)
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
Particle characteristics:	Not applicable

9.2 Other information: No data available.

10. Stability and reactivity

- 10.1 Reactivity:** Stable under normal use conditions.
- 10.2 Chemical Stability:** Stable under normal use conditions.
- 10.3 Possibility of hazardous reactions:** Stable under normal use conditions.

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- | | |
|---|---|
| 10.4 Conditions to avoid: | Stable under normal use conditions. |
| 10.5 Incompatible Materials: | Strong oxidizing substances. Strong acids. Strong bases. |
| 10.6 Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Base oil paraffinic LD 50 (Rat): > 5.000 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Base oil paraffinic LD 50 (Rabbit): 5.000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are not met.

Specified substance(s)

Base oil paraffinic OECD 404
Not irritant.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are not met.

Specified substance(s)

Base oil paraffinic OECD 405
Not irritant.

Respiratory or Skin Sensitization:

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Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: May be fatal if swallowed and enters airways

Specified substance(s)

Base oil paraffinic May be fatal if swallowed and enters airways.

11.2 Information on other hazards Endocrine disrupting properties Product:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12. Ecological information

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12.1 Toxicity

Acute toxicity
Product:
Fish
Specified substance(s)

Based on available data, the classification criteria are not met.

Base oil paraffinic

LC 50 (Fish, 96 h): > 100 mg/l

Aquatic Invertebrates
Specified substance(s)

Base oil paraffinic

EC 50 (Water Flea, 48 h): > 100 mg/l

Chronic Toxicity
Product:

Based on available data, the classification criteria are not met.

Aquatic Invertebrates
Specified substance(s)
Base oil paraffinic

NOEC (Daphnia magna, 21 d): 10 mg/l (OECD 211)

Toxicity to Aquatic Plants
Specified substance(s)
Base oil paraffinic

EC 50 (Algae, 72 h): > 100 mg/l (OECD 201)

12.2 Persistence and Degradability

Biodegradation
Product:

Not applicable for mixtures

12.3 Bioaccumulative potential

Product:

Not applicable for mixtures

12.4 Mobility in soil

Product:

Not applicable for mixtures

12.5 Results of PBT and vPvB assessment

Product:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other adverse effects

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Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects: No data available.

Water Hazard Class (WGK): WGK 1: slightly water-endangering

13. Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

European Waste Codes 13 02 05*: mineral-based non-chlorinated engine, gear and lubricating oils

14 Transport information

ADR/RID

14.1 UN Number --
14.2 UN Proper Shipping Name --
14.3 Transport Hazard Class(es) Class: Non-dangerous goods
Label(s): --
Hazard No. (ADR): --
Tunnel restriction code: --
14.4 Packing Group: --
14.5 Environmental hazards: --
14.6 Special precautions for user: --

IMDG

14.1 UN Number or ID number --
14.2 UN Proper Shipping Name: --
14.3 Transport Hazard Class(es)

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Product name: ZF Lifeguard Hybrid 3

Class:	Non-dangerous goods
Label(s):	--
EmS No.:	--
14.4 Packing Group:	--
14.5 Environmental hazards:	--
14.6 Special precautions for user:	--

IATA

14.1 UN Number or ID number:	--
14.2 Proper Shipping Name:	--
14.3 Transport Hazard Class(es):	
Class:	Non-dangerous goods
Label(s):	--
14.4 Packing Group:	--
14.5 Environmental hazards:	--
14.6 Special precautions for user:	--

14.7 7 Maritime transport in bulk according to IMO instruments: Not applicable.

15. Regulatory information

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

EU Regulations

EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:	none
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EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended:	none
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National Regulations Water Hazard Class (WGK):	WGK 1: slightly water-endangering.
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15.2 Chemical safety assessme: No Chemical Safety Assessment has been carried out.

16. Other information

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Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

H304 May be fatal if swallowed and enters airways.

Other information: The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement.

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature