



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006

ZF Lifeguard Hybrid 2

Version number: 1

Issued: 2025-10-31

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

1.1. Product identifier

Trade name

ZF Lifeguard Hybrid 2

Article No.

0671.090.548; 0671.090.516

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

Product type

Mixture.

Relevant identified uses

Transmission oil.

Not suitable for use in

This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet

SDS created by

Marcin Nadany

Supplier

ZF Aftermarket

Address

ZF Friedrichshafen AG

Obere Weiden 12

97424 Schweinfurt

Germany

Telephone

+49 9721 475 60

Email

msds.zf-aftermarket@zf.com

Web site

www.zf.com/contact

Contact person

Marcin Nadany/ Sunil Kumar Nagula



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Email

msds.zf-aftermarket@zf.com

1.4. Emergency telephone number

(+49) 89 19 240 - available in German and English

Available outside office hours

Yes

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Description

Based on available data this substance / mixture does not meet the classification criteria.

2.2. Label elements

Supplemental hazard statements

EUH208 Contains alkyl acetamide and Dialkylamine Alkylene Glycol. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

More information

Signal word: No signal word.

No Hazard Symbol required

2.3. Other hazards

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used oil may contain harmful impurities.

Not classified as flammable but will burn.

Other

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

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.



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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentra- tion	Classification	H-phrase M factor acute M factor chronic	Specific concentra- tion limits ATE	Note
Distillates (Fischer - Tropsch), heavy, C18-50 – branched, cyclic and linear	848301-69-9 482-220-0 01-0000020163-82 -	75 - 85%	Asp. Tox. 1	H304 - -		-
Alkyl acetamide	- 471-920-1 01-0000019770-68 -	1 - 2.99%	Skin Sens. 1B	H317 - -		-
N,N-dicocoalkyl 3-amino-propane-1,2-diol	897393-64-5 482-000-4 - -	0.1 - 0.99%	Skin Sens. 1, Aquatic Chronic 3	H317, H412 - -		-

Substance additional information

Chemical Characterization: Synthetic base oil and additives.

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Inhalation

No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

Skin contact

Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.

If persistent irritation occurs, obtain medical attention.



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Eye contact

Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue rinsing.

If persistent irritation occurs, obtain medical attention.

Ingestion

In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

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

Symptoms: Skin sensitisation (allergic skin reaction) signs and symptoms may include itching and/or a rash.

Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.

Ingestion may result in nausea, vomiting and/or diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to doctor/physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media**Suitable extinguishing media**

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and gases (smoke).

Carbon monoxide may be evolved if incomplete combustion occurs.

Unidentified organic and inorganic compounds.

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).



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Other

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid contact with skin and eyes.

For emergency responders: Avoid contact with skin and eyes.

6.2. Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

6.3. Methods and material for containment and cleaning up

Slippery when spilt. Avoid accidents, clean up immediately.

Prevent from spreading by making a barrier with sand, earth or other containment material.

Reclaim liquid directly or in an absorbent.

Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

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.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Technical measures: Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling: Avoid prolonged or repeated contact with skin.

Avoid inhaling vapour and/or mists.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Product Transfer: Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.

7.2. Conditions for safe storage, including any incompatibilities

Storage class (TRGS 510): 10, Flammable liquids.

Further information on storage stability: Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.

Store at ambient temperature.

Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

Packaging material: Suitable material: For containers or container linings, use mild steel or high density polyethylene.

Unsuitable material: PVC.

Container Advice: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

7.3. Specific end use(s)

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

Occupational exposure limits: See below OEL table.

Biological Limit Values (BLV): No exposure indices known.



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National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Source	Remark	Year
Oil mist, mineral	- -	- / 5 /	US. ACGIH Threshold Limit Values	TWA (inhalable frac- tion)	-
Oil mist, mineral	- -	- / 5 /	ACGIH	TWA (Inhalable partic- ulate matter)	-

8.2. Exposure controls

Appropriate engineering controls

Engineering measures: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General information: Define procedures for safe handling and maintenance of controls.
Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance.
Retain drain downs in sealed storage pending disposal or subsequent recycle.
Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment: The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.
Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye / face protection

If material is handled such that it could be splashed into eyes, protective eyewear is recommended.
Approved to EU Standard EN166.



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Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with break-through time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Other skin protection

Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.

Respiratory protection

No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Check with respiratory protective equipment suppliers.

Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [Type A/Type P boiling point > 65°C (149°F)] meeting EN14387 and EN143.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Clear, bright liquid.

Colour

Amber.



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Odour

No data available.

Odour threshold

No data available.

Melting point / freezing point

No data available.

Boiling point or initial boiling point and boiling range

> 280 °C

Method

estimated value(s)

Flammability

Not applicable (solid, gas); Not classified as flammable but will burn (liquids)).

Lower and upper explosion limit

Lower: 1%.; Upper: 10%.

Flash point

≥ 200 °C

Method

ISO 2592

Auto-ignition temperature

> 320 °C

Decomposition temperature

No data available.

pH

Not applicable.

Kinematic viscosity

26.5 mm²/s (40 °C) [DIN 51562]; ≤ 5.6 mm²/s (100 °C) [DIN 51562]

Viscosity, dynamic

No data available.

Solubility

negligible (water); not available (other solvents)

Partition coefficient n-octanol/water

> 6

Method

based on information on similar products.



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Vapour pressure

< 0.5 Pa (20 °C)

Method

estimated value(s)

Density and/or relative density846 - 852 kg/m³**Method**

ISO 12185 [15 °C]

Relative vapour density

> 5

Evaporation Rate

No data available.

Explosive properties

Not classified.

Oxidising properties

No data available.

Particle characteristics

No data available

9.2. Other information

Pour point: ≤ -48°C [DIN ISO 3016]

Conductivity: This material is not expected to be a static accumulator.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph

10.2. Chemical stability

Stable.

No hazardous reaction is expected when handled and stored according to provisions

10.3. Possibility of hazardous reactions

Strong oxidizing agents.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.



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10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Based on available data, the classification criteria are not met. (Acute oral toxicity ; Acute dermal toxicity ; Acute inhalation toxicity)

Product / Sub-stance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals	Remarks
ZF Lifeguard Hybrid 2 -	-	-	Inhalation.	-	Based on available data, the classification criteria are not met.
ZF Lifeguard Hybrid 2 -	LD50	> 5000 mg/kg	Oral.	Rat.	Low toxicity Based on available data, the classification criteria are not met.
ZF Lifeguard Hybrid 2 -	LD50	> 5000 mg/kg	Dermal	Rabbit	Low toxicity Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Slightly irritating to skin. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Slightly irritating to the eye.
Based on available data, the classification criteria are not met.



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Respiratory or skin sensitisation

Not a skin sensitiser.
Based on available data, the classification criteria are not met.

Product / Substance name CAS / EC no.	Result
Alkyl acetamide -	Experimental data has shown that the concentration of potentially sensitizing components present in this product does not induce skin sensitization. May cause an allergic skin reaction in sensitive individuals.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

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



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Other information

Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

Slightly irritating to respiratory system.

Classifications by other authorities under varying regulatory frameworks may exist.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

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

Acute fish toxicity

Product / Sub- stance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Remark
ZF Lifeguard Hybrid 2 -	LL/EL/IL50	>10 <= 100 mg/l	96 hr.	Fish.	Harmful.

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Species	Remark
ZF Lifeguard Hybrid 2 -	L/EL/IL50	>10 <= 100 mg/l	Algae.	Harmful.

Acute crustacean toxicity



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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Species	Remark
ZF Lifeguard Hybrid 2 -	LL/EL/IL50	>10 <= 100 mg/l	Daphnia magna	Harmful.

Chronical toxicity

Product / Substance name CAS / EC no.	Value / Result	Species
ZF Lifeguard Hybrid 2 -	Based on available data, the classification criteria are not met.	Daphnia magna
ZF Lifeguard Hybrid 2 -	Based on available data, the classification criteria are not met.	microorganisms
ZF Lifeguard Hybrid 2 -	Based on available data, the classification criteria are not met.	Fish.

12.2. Persistence and degradability

The product is not readily biodegradable.
Major constituents are inherently biodegradable, but contains components that may persist in the environment.

Persistent per IMO criteria.
International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."

12.3. Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4. Mobility in soil

Mobility
Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile.
Floats on water.

12.5. Results of PBT and vPvB assessment

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



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12.6. 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.

12.7. Other adverse effects

Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential. Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use.

Poorly soluble mixture.

Causes physical fouling of aquatic organisms.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Do not dispose into the environment, in drains or in water courses.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

Waste, spills or used product is dangerous waste.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination. MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Packaging

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.



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Waste code	Waste description
13 02 06*	synthetic engine, gear and lubricating oils

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

Other

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor.
The competence of the collector or contractor should be established beforehand.
Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14: Transport information

14.1. UN number

Not regulated.

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

Not regulated.

14.3. Transport hazard class(es)

Label

Not regulated.

ADR / RID Class

Not regulated.

ADR / RID Classification code

Not regulated.

ADR / RID hazard identification number

Not regulated.

IMDG Class

Not regulated.

IATA Class

Not regulated.

ADN Class

Not regulated.

ADN Class Code

Not regulated.



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14.4. Packing group

Not regulated.

14.5. Environmental hazards

Not regulated.

IMDG Marine Pollutant

Not regulated.

14.6. Special precautions for user

Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

14.7. Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15: Regulatory information

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

EU regulations

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

Annex XIV - List of substances subject to authorization: Product is not subject to Authorisation under REACH.

Volatile Organic Compound (VOC): 0 %



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National regulations

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Environmental Protection Act 1990 (as amended). Health and Safety at Work etc. Act 1974. Consumers Protection Act 1987. Pollution Prevention and Control Act 1999. Environment Act 1995. Factories Act 1961. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005 (as amended). Control of Major Accident Hazards Regulations 1999 (as amended). Renewable Transport Fuel Obligations Order 2007 (as amended). Energy Act 2011. Environmental Permitting (England and Wales) Regulations 2010 (as amended). Waste (England and Wales) Regulations 2011 (as amended). Planning (Hazardous Substances) Act 1990 and associated regulations. The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011.

Other regulations, limitations and legal regulations

Europe inventory (EC): All components are listed or exempted.

United States Inventory (TSCA, Toxic Substances Control Act, section 8b): All components are listed or exempted.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50



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- Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative ACGIH : USA. ACGIH Threshold Limit Values (TLV) ACGIH / TWA : 8-hour, time-weighted average

Further information: Training advice : Provide adequate information, instruction and training for operators.

Other information : No Exposure Scenario annex is attached to this safety data sheet. It is a non-classified mixture containing hazardous substances as detailed in Section 3; relevant information from Exposure Scenarios for the hazardous substances contained have been integrated into the core sections 1-16 of this SDS. A vertical bar (|) in the left margin indicates an amendment from the previous version.

Sources of key data used to compile the Safety Data Sheet : The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID data base, EC 1272 regulation, etc).

Phrase meaning

Asp. Tox. 1 - Aspiration hazard, hazard category 1

Skin Sens. 1B - Skin sensitisation, hazard category 1, sub-category 1B

Skin Sens. 1 - Skin sensitisation, hazard category 1

Aquatic Chronic 3 - Hazardous to the aquatic environment — Chronic hazard category 3

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains alkyl acetamide and Dialkylamine Alkylene Glycol. May produce an allergic reaction.

EUH210 Safety data sheet available on request.



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Protection of human health and the environment

Other

Additional information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.