

ZF5

SAFETY DATA SHEET

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

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

1.1 Product identifier

Product name: ZF5

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

Identified uses: Gear oil

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier AUTOMOCION SOSTENIBLE T+C, S.L.
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1.4 Emergency telephone number: +34 948 854 079

SECTION 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. Environmental

Hazards

Chronic hazards to the aquatic environment Category 3 H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Hazard Statement(s): H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment.

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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.

Supplemental label information

EUH208: Contains: Triazole amine derivative. May produce an allergic reaction.

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.

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.

Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

General information: Mixture containing severely refined base oils and additives.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
base oil, low viscous	EINECS: 276-738-4	50,00% - <100,00%	01-2119474889-13	
Amine aromatic , alkylated	EINECS: 270-128-1	0,10% - <1,00%	01-2119491299-23	
Alkyl amine	EC: 620-540-6	0,10% - <0,25%	01-2119510877-33	
prim. alkanolamine ether	EC: 939-485-7	0,01% - <0,10%	01-2119974116-35	
Triazole amine derivative	EC: 401-280-0	0,01% - <0,10%	01-2119930450-49	

* 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, low viscous	EINECS: 276-738-4	CLP: Asp. Tox. 1;H304
Amine aromatic , alkylated	EINECS: 270-128-1	CLP: Repr. 2;H361f, Aquatic Chronic 3;H412
Alkyl amine	EC: 620-540-6	CLP: Skin Corr. 1C;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410, Acute Tox. 4;H302; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1

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prim. alkanolamine ether	EC: 939-485-7	CLP:	Acute Tox. 4;H302, Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 100; M-Factor (aquatic chronic): 1
Triazole amine derivative	EC: 401-280-0	CLP:	Skin Corr. 1B;H314, Skin Sens. 1A;H317, Aquatic Chronic 1;H410, Eye Dam. 1;H318

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 Nota L/ Nota N of Annex VI of Regulation EC 1272/2008."

SECTION 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.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: May cause skin and eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed: Get medical attention if symptoms occur.

SECTION 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 fire fighting water in accordance with official regulations. Collect contaminated fire fighting 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.

SECTION 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:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. 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.

SECTION 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:

Local regulations concerning handling and storage of 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

SECTION 8: Exposure controls/personal protection**8.1 Control Parameters****Occupational Exposure Limits**

Chemical name	Type	Exposure Limit Values	Source
White mineral oil	AGW	5 mg/m ³	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2015)
White mineral oil - Respirable fraction.	AGW	5 mg/m ³	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (11 2015)

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

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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:	Avoid contact with skin and eyes. 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Color:	Light brown
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water)
Freezing point:	not determined
Boiling Point:	not determined
Flash Point:	> 220 °C
Flammability (solid, gas):	not determined
Explosion Limit - Upper (%):	Not applicable for mixtures
Explosion Limit - Lower (%):	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	0,84 g/cm ³ (20 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.

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Partition coefficient (n-octanol/water):	Not applicable for mixtures
Auto-ignition temperature:	not determined
Decomposition Temperature:	not determined
Kinematic viscosity:	37 mm ² /s (40 °C)
Particle characteristics:	Not applicable
9.2 Other information	No data available.

SECTION 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.
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.

SECTION 11: Toxicological information
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity
Oral

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

Specified substance(s)

base oil, low viscous LD 50 (Rat): > 5.000 mg/kg (OECD 401)

Amine aromatic , alkylated LD 50 (Rat): > 5.000 mg/kg (OECD 401)

Alkyl amine LD 50 (Rat): 1.350 mg/kg (OECD 401)

Dermal

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

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)

Alkyl amine OECD 404 (Rabbit, 14 d):
Causes severe skin burns.

Serious Eye Damage/Eye Irritation:

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

Specified substance(s)

Amine aromatic , alkylated OECD 405 (Rabbit):
Not irritant.

Respiratory or Skin Sensitization:

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.

Specified substance(s)

Amine aromatic , alkylated

No sensitizing effect (guinea pig); OECD 406

Alkyl amine

No sensitizing effect (guinea pig); OECD 406

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.

Specified substance(s)

Amine aromatic , alkylated

oral (Rat, OECD 421), Suspected of damaging fertility.

Specific Target Organ Toxicity - Single Exposure Specific

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

Target Organ Toxicity - Repeated Exposure Aspiration

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

Hazard

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

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.

SECTION 12: Ecological information**Acute toxicity**

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

Fish**Specified substance(s)**

Amine aromatic , alkylated

LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)

Alkyl amine

LC 50 (Fish, 96 h): 0,1 mg/l (OECD 203)

Aquatic Invertebrates**Specified substance(s)**

base oil, low viscous

EL50 (Water Flea, 48 h): > 10.000 mg/l (OECD 202)

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Amine aromatic , alkylated EC 50 (Daphnia magna): 51 mg/l (OECD 202)

Alkyl amine EC 50 (Water Flea, 48 h): 0,043 mg/l (OECD 202)

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish**Specified substance(s)**

base oil, low viscous NOEC (Fish, 14 d): > 1.000 mg/l

Aquatic Invertebrates**Specified substance(s)**

base oil, low viscous NOEC (Water Flea, 21 d): 10 mg/l (OECD 211)

Alkyl amine EC 10 (Water Flea, 21 d): 0,0107 mg/l (OECD 211)

Toxicity to Aquatic Plants Specified**substance(s)**

base oil, low viscous NOEC (Alga, 72 h): > 100 mg/l (OECD 201)

Amine aromatic , alkylated EC 50 (72 h): > 100 mg/l (OECD 201)

Alkyl amine EC 50 (Alga, 72 h): 0,0538 mg/l (OECD 201)
NOEC (Alga, 72 h): 0,0156 mg/l

12.2 Persistence and Degradability**Biodegradation****Product:**

Not applicable for mixtures

Specified substance(s)

Amine aromatic , alkylated Not readily degradable.

Alkyl amine 63 % (28 d, OECD 301D) Readily biodegradable

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:

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

12.6 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.

12.7 Other adverse effects:

Harmful to aquatic life with long lasting effects.

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Water Hazard Class (WGK): WGK 2: significantly water-endangering.

SECTION 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 06*: synthetic engine, gear and lubricating oils

SECTION 14: Transport information

ADR/RID

14.1 UN number or ID 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)
 Class: Non-dangerous goods
 Label(s): —
 EmS No.: —
 14.3 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: —

SECTION 15: Regulatory information

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

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

Regulations

EU. Regulation 2024/590/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

National Regulations

Water Hazard Class (WGK): WGK 2: significantly water-endangering.

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

SECTION 16: Other information

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

Wording of the H-statements in section 2 and 3

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361f	Suspected of damaging fertility.
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.

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

Revision Date: 27.08.2024

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.