



SAFETY DATA SHEET

*In accordance with Article 10 of the
Standards for Classification, Labeling, and
Material Safety Data Sheets for Chemical
Substances.*

Version number: 1

Issued: 2026-09-04

ZF PowerFluid Pro 1

SECTION 1: Identification

Product identifier

Trade name

ZF PowerFluid Pro 1

Article No.

5961.309.672, 5961.309.673, 5961.309.674, 5961.309.935

Recommended use of the chemical and restrictions on use

Product type

Mixture

Use

Lubricant

Not suitable for use in

No uses advised against identified.

Supplier's details

SDS created by

Global Division B Product Compliance Mgmt. System (BWC)

Supplier

ZF Services Korea Co., Ltd

Address

1952 Pyeongchon-ro

Bupyeong-gu

21314 Incheon

Korea

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+ 82 32 505 1530 / +82 32 505 1529

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Web site

<https://aftermarket.zf.com/kr>

Contact person

Global Division B Product Compliance Mgmt. System (BWC)



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Email address

msds.zf-aftermarket@zf.com

Emergency phone number

+82 32 505 1529 / 1530

Available outside office hours

Yes

SECTION 2: Hazard identification

Classification of the substance or mixture and any national or regional information

Description

This product is classified as non-hazardous under applicable laws and is not subject to labeling requirements.

Stable under normal use conditions.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Label elements, including precautionary statements

More information

This product is classified as non-hazardous under applicable laws and is not subject to labeling requirements.

Hazard labeling: Not applicable.

Other hazards which do not result in classification

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.

SECTION 3: Composition/information on ingredients

Mixture

Product based on

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3%*

Substance additional information

Mixture containing severely refined base oils and additives. The components are not hazardous or are below required disclosure limits.



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SECTION 4: First-aid measures

Description of necessary first-aid measures

Be aware of own risk during rescue!
Observe good industrial hygiene practices.
Instantly remove any clothing soiled by the product.

Inhalation

Supply fresh air; consult doctor in case of symptoms.

Skin contact

Wash with soap and water.

Eye contact

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

Ingestion

Rinse mouth thoroughly.

Most important symptoms/effects, acute and delayed

May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed, if necessary

Get medical attention if symptoms occur.
Notes to the physician: Symptomatic and supportive treatment.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) 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.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).

During fire, gases hazardous to health may be formed.



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Special protective actions for fire-fighters

Special protective equipment for fire-fighters

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

In case of spills, beware of slippery floors and surfaces.

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.

Methods and materials 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.

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

Precautions for safe handling

Preventive handling precautions

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.

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.



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Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits

None of the components have assigned exposure limits.

Appropriate engineering controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. 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.

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.

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.

Personal Protective Equipment Symbols



Eye / face protection

Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.



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Hand protection

Material: Nitrile butyl rubber (NBR).

Min. Breakthrough time: ≥ 480 min

Recommended thickness of the material: ≥ 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 skin protection

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.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state

Liquid

Colour

Amber

Odour

Characteristic

Odour threshold

Not applicable for mixtures

Melting point / freezing point

Not applicable for mixtures

Boiling point or initial boiling point and boiling range

Value not relevant for classification



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Flammability

Value not relevant for classification [solid, gas]

Lower and upper explosion limit

Not applicable for mixtures

Flash point

230 °C

Auto-ignition temperature

Value not relevant for classification

Decomposition temperature

Value not relevant for classification

pH

Not applicable

Kinematic viscosity

105 mm²/s (40 °C)

Solubility

No data available

Water solubility

Insoluble in water

Partition coefficient n-octanol/water

Not applicable for mixtures

Vapour pressure

Not applicable for mixtures

Density and/or relative density

0.86 g/cm³ (15 °C)

Relative vapour density

No data available

Evaporation Rate

Not applicable for mixtures

Explosive properties

Value not relevant for classification

Oxidising properties

Value not relevant for classification



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Particle characteristics

No data available

Other information

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal use conditions.

Chemical stability

Stable under normal use conditions.

Possibility of hazardous reactions

Stable under normal use conditions.

Conditions to avoid

Stable under normal use conditions.

Incompatible materials

Strong oxidizing substances. Strong acids. Strong bases.

Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11. Toxicological information

Information on the likely routes of exposure

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory or skin sensitisation

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



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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.

Information on other hazards

Other information

No data available.

SECTION 12: Ecological information

Toxicity

Acute toxicity

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

Chronical toxicity

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

Persistence and degradability

Not applicable for mixtures

Bioaccumulative potential

Not applicable for mixtures

Mobility in soil

Mobility

Not applicable for mixtures



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Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

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

Endocrine disrupting properties

No data available

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Disposal considerations

Dispose in accordance with all applicable regulations.

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.

Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.

SECTION 14: Transport information

UN number

Not Regulated.

UN proper shipping name

ADR / RID / ADN proper shipping name

Not Regulated.

IMDG proper shipping name

Not Regulated.

IATA proper shipping name

Not Regulated.

Transport hazard class(es)

Label

Not Regulated.



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ADR / RID Class

Not Regulated.

IMDG Class

Not Regulated.

IATA Class

Not Regulated.

ADN Class

Not Regulated.

Packing group

Not Regulated.

Environmental hazards

No

IMDG Marine Pollutant

No

Special precautions for user

Not applicable.

Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

EU regulations

Not Applicable.

National regulations

The substances subject to phased introduction for the product in question are listed in the 'Korean Existing Chemicals List' and have been verified via KREACH (<https://kreach.me.go.kr/repwrt/mttr/en/mttrList.do>).

Chemical safety assessment

No data available



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SECTION 16: Other information

Other

Additional information

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.