

according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : ZF-Lifeguardfluid 5 Company : **ZF Getriebe GmbH**

Südring

66117 Saarbrücken Deutschland : +49 681 920 2721 : +49 681 920 131 2721

Telefax : +49 681 920 131 2721
Contact person : Abteilung Technische Koordination MKTK

E-mail address : aftersales-sbr@zf.com

Emergency telephone number : +49 681 920-2222 (Plant medical service)

<u>Use</u>

Telephone

Specific use(s) : Polishing agent and lubricant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

No dangerous ingredients according to Directive 2001/58/EC

3. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

4. FIRST AID MEASURES

General advice : If you feel unwell, seek medical advice (show the label where

possible).

Remove from exposure, lie down.

Never give anything by mouth to an unconscious person.

Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

<u>Inhalation</u> : Remove to fresh air.

Keep patient warm and at rest.

In the case of inhalation of aerosol/mist consult a physician if

necessary.

Skin contact : Wash off immediately with soap and plenty of water.

<u>Eye contact</u>: Remove contact lenses.

Immediately flush eye(s) with plenty of water.

Seek medical advice.

Ingestion : If swallowed, seek medical advice immediately and show this

container or label.

Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

<u>Suitable extinguishing media</u>: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific hazards during fire

fighting

Fire will produce dense black smoke containing hazardous

combustion products (see heading 10).

Exposure to decomposition products may be a hazard to health.

Special protective equipment

for fire-fighters

Complete suit protecting against chemicals

<u>Further information</u>: Standard procedure for chemical fires.

In the event of fire and/or explosion do not breathe fumes. Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. Use water spray to cool unopened containers.

Fire residues and contaminated fire extinguishing water must be

disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

<u>Personal precautions</u> : Refer to protective measures listed in sections 7 and 8.

Ensure adequate ventilation, especially in confined areas.

Environmental precautions : Try to prevent the material from entering drains or water courses.

Avoid subsoil penetration.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods for cleaning up : Contain and collect spillage with non-combustible absorbent material,



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

(e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

<u>Additional advice</u> : Contaminated surfaces will be extremely slippery.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Avoid contact with skin and eyes.

Avoid formation of aerosol.

For personal protection see section 8.

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

<u>Dust explosion class</u> : not applicable

Storage

Requirements for storage

areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage : Keep away from food, drink and animal feeding stuffs.

Remarks : No decomposition if stored and applied as directed.

Other information

Water contaminating class

(Germany)

: WGK 2, water endangering

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures

<u>General advice</u>: Provide adequate ventilation.



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.

Hand protection

Glove thickness : 0,4 mm
Material : Nitrile rubber

Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to

place of work.

For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove

manufacturer.

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing

<u>Hygiene measures</u> : Handle in accordance with good industrial hygiene and safety

practice.

General industrial hygiene practice. Avoid contact with the skin and the eyes. When using, do not eat, drink or smoke.

Wash hands before breaks and at the end of workday.

Wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

<u>Colour</u> : light brown

Odour : oily

Safety data

pH : not applicable

Explosive properties : Explosive properties according to the EU : Not explosive

Melting point/range : -51 °C

Method: ISO 3016

Boiling point/range : no data available



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

Flash point : > 220 °C

Method: ISO 2592

<u>Autoignition temperature</u> : not auto-flammable

<u>Lower explosion limit</u> : 0,6 %(V)

<u>Upper explosion limit</u> : 6,5 %(V)

Density : 0,85 g/cm3

at 20 °C

Water solubility : insoluble

<u>Viscosity, kinematic</u> : 38 mm2/s

at 40 °C

Method: ISO 3104

10. STABILITY AND REACTIVITY

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

(NOx), dense black smoke.

<u>Thermal decomposition</u>: No decomposition if stored and applied as directed.

<u>Hazardous reactions</u>

Stability:

Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Skin irritation : rabbi

Method: OECD Test Guideline 404

No skin irritation

Eye irritation : rabbit

Method: OECD Test Guideline 405

No eye irritation

<u>Sensitization</u> : No known sensitising effect.

<u>Further information</u>: Health injuries are not known or expected under normal use.



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

12. ECOLOGICAL INFORMATION

Further information on ecology

Adsorbed organic bound

halogens (AOX)

not included

Other ecotoxicological advice : T

The product should not be allowed to enter drains, water courses or

the soil.

13. DISPOSAL CONSIDERATIONS

Advice on disposal and

packaging

Disposal:

In accordance with local and national regulations.

EU Waste code: EWC : Waste Key (unused product) :

130205, mineral-based non-chlorinated engine, gear and lubricating

oils

Waste key (used product):

130205, mineral-based non-chlorinated engine, gear and lubricating

oils

Disposal of uncleaned

packaging

Waste key (uncleaned packaging):

150110, packaging containing residues of or contaminated by

dangerous substances

14. TRANSPORT INFORMATION

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

15. REGULATORY INFORMATION

Labelling according to EC Directives



according to EC directive 91/155/EEC

Trade name: ZF-Lifeguardfluid 5

Additional advice : Not a hazardous substance or preparation according to EC-directives

67/548/EEC or 1999/45/EC. The product does not need to be labelled

in accordance with EC directives or respective national laws.

VOC: : Directive 1999/13/EC

0 %

Volatile CMR compounds [%]: 0 %

Volatile halogenated compounds / R40 [%]: 0 %

VOC content less water: 0 g/l

National legislation

Water contaminating class

(Germany)

: WGK 2 water endangering

TA Luft : no data available

16. OTHER INFORMATION

R-phrases corresponding to the number shown in section 2:

Further 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.