

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 07/08/2012 Revision date: 17/10/2024 Supersedes version of: 27/03/2023 Version: 3.1

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

1.1. Product identifier

Product form : Mixture
Product name : 76680 - Hydraulic Oil ZF-HVLPD 46
Product code : 76680

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Function or use category : Hydraulic fluids and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Transnational Blenders bv
Wieldrechtseweg, 37
NL- 3316 BG Dordrecht – Netherlands Zuid Holland
Netherlands
T +31 (0)78 6527652
technical@tnb.nl - www.tnb.nl

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|--|--|--|---------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|-----------|---|
| Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L) | CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25 | ≥ 90 | Not classified |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L) | CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299-27 | ≥ 1 – < 5 | Asp. Tox. 1, H304 |

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after inhalation : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after skin contact : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after eye contact : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after ingestion : After adequate first aid, no further treatment is required unless symptoms reappear.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes.
Handling temperature : ≤ 40 °C
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation.
Storage conditions : Store in a well-ventilated place. Keep cool.
Storage temperature : ≤ 40 °C
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

No additional information available

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

EU - Indicative Occupational Exposure Limit (IOEL)

| | |
|----------|---------------------|
| IOEL TWA | 5 mg/m ³ |
|----------|---------------------|

| | |
|-----------|----------------------|
| IOEL STEL | 10 mg/m ³ |
|-----------|----------------------|

Ireland - Occupational Exposure Limits

| | |
|-------------|--------------------------------|
| OEL TWA [2] | 5 ppm Form: inhalable fraction |
|-------------|--------------------------------|

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

EU - Indicative Occupational Exposure Limit (IOEL)

| | |
|----------|---------------------|
| IOEL TWA | 5 mg/m ³ |
|----------|---------------------|

| | |
|-----------|----------------------|
| IOEL STEL | 10 mg/m ³ |
|-----------|----------------------|

Ireland - Occupational Exposure Limits

| | |
|-------------|--------------------------------|
| OEL TWA [2] | 5 ppm Form: inhalable fraction |
|-------------|--------------------------------|

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection

| Type | Field of application | Characteristics | Standard |
|----------------|----------------------|-----------------|----------|
| Safety glasses | Droplet | clear | EN 166 |

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

| Hand protection | | | | | |
|-----------------|---|-------------------|----------------|-------------|------------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| | Nitrile rubber (NBR), Neoprene rubber (HNBR) | 5 (> 240 minutes) | 0.7 | 3 (> 0.65) | EN ISO 374 |
| | Polyvinylchloride (PVC) | 2 (> 30 minutes) | 0.4 | 3 (> 0.65) | EN ISO 374 |

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | : Liquid |
| Colour | : light yellow. |
| Odour | : Not available |
| Odour threshold | : Not available |
| Melting point | : Not applicable |
| Freezing point | : -42 °C (ASTM D7346) |
| Boiling point | : Not available |
| Flammability | : Non flammable. |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : > 201 °C (ASTM D92) |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : Not available |
| Viscosity, kinematic | : 45 mm ² /s @ 40°C (ASTM D7042) |
| Solubility | : insoluble in water. |
| Partition coefficient n-octanol/water (Log K _{ow}) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : 862 kg/m ³ @ 15°C (ASTM D4052) |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|-----------------|--|
| LD50 oral (rat) | > 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test |
|-----------------|--|

| | |
|----------------------|---|
| LD50 dermal (rabbit) | > 5000 mg/kg 402 Acute Dermal Toxicity Test |
|----------------------|---|

| | |
|---|---|
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test |
|---|---|

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|-----------------|--|
| LD50 oral (rat) | > 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test |
|-----------------|--|

| | |
|----------------------|---|
| LD50 dermal (rabbit) | > 5000 mg/kg 402 Acute Dermal Toxicity Test |
|----------------------|---|

| | |
|---|---|
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test |
|---|---|

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|----------------------------|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
|----------------------------|---|

| | |
|-------------------------------------|--|
| NOAEL (dermal, rat/rabbit, 90 days) | ≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |
|-------------------------------------|--|

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|----------------------------|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
|----------------------------|---|

Aspiration hazard : Not classified

76680 - Hydraulic Oil ZF-HVLPD 46

| | |
|----------------------|---|
| Viscosity, kinematic | 45 mm ² /s @ 40°C (ASTM D7042) |
|----------------------|---|

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|----------------------|---|
| Viscosity, kinematic | 150 (1.99 – 847) mm ² /s @40°C |
|----------------------|---|

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|----------------------|----------------------------------|
| Viscosity, kinematic | > 20.5 mm ² /s @ 40°C |
|----------------------|----------------------------------|

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute) | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|----------------------|--|
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna |
| NOEC chronic fish | > 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic algae | ≥ 100 mg/l Pseudokirchneriella subcapitata (72h) |

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|------------------------|--|
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna |
| EC50 72h - Algae [1] | ≥ 100 |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss 14d |
| NOEC chronic crustacea | 10 mg/l Daphnia magna 21d |
| NOEC chronic algae | > 100 mg/l Pseudokirchneriella subcapitata (72hrs) |

12.2. Persistence and degradability

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|----------------|----------------------|
| Biodegradation | 31 % OECD 301F (28d) |
|----------------|----------------------|

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not readily biodegradable. |
| Biodegradation | 31 % OECD TG 301 F (28d) |

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.3. Bioaccumulative potential

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|-------------------------------------|-----|
| Bioconcentration factor (BCF REACH) | 260 |
|-------------------------------------|-----|

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|---|
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|-----------------------------------|-----------------------------------|-----------------------------------|
| 14.1. UN number or ID number | | | | |
| Not regulated for transport | | | | |
| 14.2. UN proper shipping name | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |
| No supplementary information available | | | | |

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes

| Section | Changed item | Change | Comments |
|---------|---|----------|----------|
| | Supersedes | Modified | |
| | Revision date | Modified | |
| | Flammability (solid, gas) | Added | |
| 2.1 | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Removed | |

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Indication of changes | | | |
|-----------------------|---|----------|----------|
| Section | Changed item | Change | Comments |
| 2.1 | Adverse physicochemical, human health and environmental effects | Added | |
| 2.2 | EUH-statements | Added | |
| 3 | Composition/information on ingredients | Modified | |
| 4.1 | First-aid measures after skin contact | Added | |
| 4.1 | First-aid measures after inhalation | Added | |
| 4.1 | First-aid measures after ingestion | Added | |
| 4.1 | First-aid measures after eye contact | Added | |
| 4.3 | Other medical advice or treatment | Added | |
| 5.1 | Suitable extinguishing media | Added | |
| 5.2 | Hazardous decomposition products in case of fire | Added | |
| 5.3 | Protection during firefighting | Added | |
| 6.1 | Emergency procedures | Added | |
| 6.1 | Protective equipment | Added | |
| 6.2 | Environmental precautions | Added | |
| 6.3 | Methods for cleaning up | Added | |
| 6.3 | Other information | Added | |
| 6.4 | Reference to other sections (8, 13) | Added | |
| 7.1 | Precautions for safe handling | Added | |
| 7.1 | Hygiene measures | Added | |
| 7.2 | Storage temperature | Modified | |
| 7.2 | Storage conditions | Added | |
| 8.2 | Environmental exposure controls | Added | |
| 8.2 | Respiratory protection | Added | |
| 8.2 | Hand protection | Added | |
| 8.2 | Eye protection | Added | |
| 8.2 | Appropriate engineering controls | Added | |
| 8.2 | Skin and body protection | Added | |
| 9.1 | Viscosity, kinematic | Modified | |
| 9.1 | Freezing point | Modified | |
| 9.1 | Flash point | Modified | |
| 9.1 | Density | Modified | |
| 10.1 | Reactivity | Added | |
| 10.2 | Chemical stability | Added | |
| 10.3 | Possibility of hazardous reactions | Added | |
| 10.4 | Conditions to avoid | Added | |
| 10.6 | Hazardous decomposition products | Added | |
| 12.1 | Ecology - general | Added | |

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Indication of changes | | | |
|-----------------------|--------------------------------|----------|----------|
| Section | Changed item | Change | Comments |
| 13.1 | Waste disposal recommendations | Modified | |
| 13.1 | Waste treatment methods | Added | |
| 15.2 | Chemical safety assessment | Added | |
| 16 | Abbreviations and acronyms | Added | |

| Abbreviations and acronyms: | |
|-----------------------------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |

76680 - Hydraulic Oil ZF-HVLPD 46

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations and acronyms: | |
|-----------------------------|--|
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| H304 | May be fatal if swallowed and enters airways. |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.