



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: HYDROTHERM 46 M

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

Identified uses: Hydraulic fluid

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

Fuchs Schmierstoffe GmbH
Friesenheimer Str. 19
68169 Mannheim

US Distributor

Fuchs Lubricants Co.
17050 Lathrop Avenue
Harvey, IL 60426
(708) 333-8900
(800) 255-3924 24 hrs Emergency

Telephone:

+49 621 3701-0 (ZENTRALE)

Fax:

+49 621 3701-570

Contact Person:

Telephone:

Fuchs Schmierstoffe GmbH Abteilung Produktsicherheit

Fax:

+49 621 3701-7303

E-mail:

produktsicherheit@fuchs-schmierstoffe.de

1.4 Emergency telephone number:

+49 621 3701-1333 ODER +49 621 3701-0

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 Directive 67/548/EEC or 1999/45/EC as amended.

The product is not classified according to Directive 67/548/EEC or Directive 1999/45/EC

Product name: HYDROTHERM 46 M

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye irritation	Category 2	H319: Causes serious eye irritation.
Specific Target Organ Toxicity - Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements



Signal Words: Warning

Hazard Statement(s): H315: Causes skin irritation.
H319: Causes serious eye irritation.
H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement

Prevention: P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P280: Wear protective gloves/eye protection/face protection.

Response: P314: Get medical advice/attention if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

2.3 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of polyethyleneglycol, water and inhibitors.



Product name: HYDROTHERM 46 M

Chemical name	Concentration *	Identifier	REACH Registration No.	Notes
Diglycol	15,00 - <25,00%	203-872-2	01-2119457857-21	
Alkanolamine	<2,00%	203-542-8	01-2119492298-24	

* 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	Classification
Diglycol	DSD: Xn; R22 CLP: Acute Tox. 4;H302, STOT RE 2;H373
Alkanolamine	DSD: R10 Xn; R20/21/22 C; R34 CLP: Skin Corr. 1B;H314, Flam. Liq. 3;H226, Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

The full text for all R-phrases and H-statements is displayed in section 16.

SECTION 4: First aid measures

General: Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into clothing pockets.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed: Causes serious eye irritation. Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

Product name: HYDROTHERM 46 M

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:

The product is non-combustible.

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:

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers).

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust).

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.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Avoid contact with skin.

7.2 Conditions for safe storage, including any incompatibilities:

Local regulations concerning handling and storage of waterpolluting products have to be followed. Prevent formation of aerosols.

Product name: HYDROTHERM 46 M

7.3 Specific end use(s): not applicable

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

8.2 Exposure 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.

Individual protection measures, such as personal protective equipment

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:

Safety glasses (EN 166) recommended during refilling. Avoid contact with eyes.

Skin protection

Hand Protection:

Nitrile butyl rubber (NBR). 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:

Seek advice from local supervisor. Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

Thermal hazards:

No data available.

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.

Product name: HYDROTHERM 46 M

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Characteristic
Odor Threshold:	No data available.
pH:	9,9 (, 20 °C)
Freezing point:	No data available.
Boiling Point:	not applicable
Flash Point:	> 260 °C
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)-:	No data available.
Flammability Limit - Lower (%)-:	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	1,08 g/cm ³ (15 °C)

Solubility(ies)

Solubility in Water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	46 mm ² /s (40 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal temperature conditions and recommended use.
10.2 Chemical Stability:	No data available.
10.3 Possibility of Hazardous Reactions:	None under normal conditions.
10.4 Conditions to Avoid:	Avoid heat or contamination.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.



Product name: HYDROTHERM 46 M

10.6 Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation: No data available.

Ingestion: No data available.

Skin Contact: Causes skin irritation.

Eye contact: Causes eye irritation.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: ATEmix: > 2.000 mg/kg

Specified substance(s)

Diglycol No data available.

Alkanolamine LD 50 (Rat): 2.130 mg/kg

Dermal

Product: ATEmix: > 2.000 mg/kg

Specified substance(s)

Diglycol No data available.

Alkanolamine LD 50 (Rabbit): 1.220 mg/kg

Inhalation

Product: ATEmix: > 20 mg/l

Specified substance(s)

Diglycol No data available.

Alkanolamine No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s)

Diglycol No data available.

Alkanolamine No data available.

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)

Diglycol No data available.

Alkanolamine No data available.

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Serious Eye Damage/Eye Irritation:

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

In vivo

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

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Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Other Adverse Effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: LC 50 (Fish, 48 h): 500 mg/l

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

Product name: HYDROTHERM 46 M

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

12.2 Persistence and Degradability

Biodegradation

Product: > 70 % (28 d, OECD 301C) Readily biodegradable

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

12.3 Bioaccumulative Potential

Product: No data available.

Specified substance(s)

Diglycol No data available.
Alkanolamine No data available.

12.4 Mobility in Soil:

No data available.

Known or predicted distribution to environmental compartments

Diglycol No data available.
Alkanolamine No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

Diglycol No data available.
Alkanolamine No data available.

12.6 Other Adverse Effects:

No data available.

SECTION 13: Disposal considerations
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13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: 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.

European Waste Codes

13 01 11*: synthetic hydraulic oils

Product name: HYDROTHERM 46 M

SECTION 14: Transport information

ADR/RID

- 14.1 UN 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: —

ADN

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
 - Class: Non-dangerous goods
 - Label(s): —
- 14.3 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

IMDG

- 14.1 UN 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: —
- 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: —

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

SECTION 15: Regulatory information

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

Product name: HYDROTHERM 46 M

National Regulations

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 R-phrases and H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
R10	Flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed.
R34	Causes burns.

Training information:

Follow training instructions when handling this material.

Other information:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

Revision Date:

02.06.2015

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.