

according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Page 1 of 10

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

1.1. Product identifier

Hydrauliköl HLP 46

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

Use of the substance/mixture

Hydraulic oil. Product Categories [PC]: PC 17 Hydraulic fluids.

1.3. Details of the supplier of the safety data sheet

no. Details of the supplier of the su	cty data sheet	
Company name:	Indunorm Hydraulik GmbH	
Street:	Oderstraße 3	
Place:	D-47506 Neukirchen-Vluyn	
Telephone:	+49 (0) 2845 2950 0	Telefax: +49 (0) 2845 2950 480
E-mail:	info@indunorm.de	
Contact person:	Vertrieb	Telephone: +49 (0) 2845 2950 230
Responsible Department:	Call a POISON CENTER/doctor/.	
1.4. Emergency telephone	+49 (0) 551 19240	
number:	Giftinformationszentrum - Nord	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. Do not handle until all safety precautions have been read and understood. Discharge into the environment must be avoided.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Contains: Mineral oil, Additive.

Hazardous components

CAS No	Chemical name				
	EC No Index No REACH No				
	GHS Classification				
64742-56-9	Distillates (petroleum), solvent-dew	1 - < 5 %			
	265-159-2 649-469-00-9 01-2119480132-48				
	Asp. Tox. 1; H304				

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



Page 2 of 10

according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	EC No Chemical name		
	Specific Conc. Limits, M-factors and ATE			
64742-56-9	265-159-2 Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified			
inhalation: LC50 = > 5,53 mg/l (dusts or mists); dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg				

Further Information

The mineral oils in the product contain < 3 % DMSO-extract (IP 346).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!

Move victim out of danger zone.

Remove contaminated, saturated clothing immediately.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Avoid oil mist

Move victim to fresh air. Put victim at rest and keep warm. Get medical advice/attention if you feel unwell.

After contact with skin

After contact with skin, wash immediately with: Water and soap. Immediately remove any contaminated clothing, shoes or stockings. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a physician immediately. No administration in cases of unconsiousness or cramps.

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

No information available.

In all cases of doubt, or when symptoms persist, seek medical advice.

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

Foam, Extinguishing powder, Sand, Water mist, Carbon dioxide (CO2).

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO2), Sulphur dioxide (SO2), Phosphorus oxides, Carbon monoxide.



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

5.3. Advice for firefighters

Page 3 of 10

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Respiratory protection necessary at: aerosol or mist generation. (See section 8.) Avoid contact with skin and eyes. Wear personal protection equipment. In case of leakage, eliminate all ignition sources. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Prevent spread over a wide area (e.g. by containment or oil barriers). Take up mechanically, placing in appropriate containers for disposal. Remove from the water surface (e.g. skimming, sucking). High slip hazard because of leaking or spilled product. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Personal protection equipment: refer to chapter 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe vapour/aerosol. Provide adequate ventilation. Avoid contact with skin and eyes. Remove contaminated, saturated clothing immediately. For industrial purposes only.

Advice on protection against fire and explosion

No special fire protection measures are necessary. Avoid oil mist

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Fire class B (DIN EN 2).

Advice on general occupational hygiene

Do not eat, drink, smoke or sneeze at the workplace.

Avoid contact with skin, eyes and clothes.

Protect skin by using skin protective cream.

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and after work.

After cleaning apply high-fat content skin care cream.

Page 4 of 10



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Do not put any product-impregnated cleaning rags into your trouser pockets.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product. Keep container tightly closed and in a well-ventilated place. Always close containers tightly after the removal of product. Recommended storage temperature: 5 - 30 °C Do not store at temperatures over: 40 °C

Hints on joint storage

Do not store together with: Oxidising agent, Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Protect against: Heat, Light, moisture. Protect from direct sunlight.

7.3. Specific end use(s)

Hydraulic oil. Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent					
DNEL type		Exposure route	Effect	Value		
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Bas	seoil - unspecified				
Worker DNEL,	long-term	inhalation	systemic	2,73 mg/m³		
Worker DMEL,	long-term	inhalation	local	5,58 mg/m³		
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	local	1,19 mg/m³		
Consumer DNE	EL, long-term	oral	systemic	0,74 mg/kg bw/day		

PNEC values

CAS No	Name of agent			
Environmental	compartment	Value		
64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified				
Secondary poisoning 9,33 mg/kg				

Additional advice on limit values

Air limit values: Mineral oil mist

Limit value type (country of origin): US-OSHA PEL-Value: 5 mg/m³ Limit value type (country of origin): ACGIH STEL-Value: 10 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses. (EN 166) In case of increasing hazard add: Eye-shade.



Page 5 of 10

according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN 420, EN ISO 374.

Suitable material: NBR (Nitrile rubber), PVC (polyvinyl chloride), FKM (fluororubber).

Required properties: liquid-tight.

penetration time (maximum wearing period): > 240 min.

Thickness of glove material: 0,4 mm

Before using check leak tightness / impermeability.

Skin protection

Handling larger quantities: Wear suitable protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: exceeding exposure limit values, insufficient ventilation. aerosol or mist generation.

Suitable respiratory protective equipment: A2/P2 Combination filter device (DIN EN 141)..

Environmental exposure controls

Make sure spills can be contained (e.g. sump pallets or kerbed areas).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

.1. Information on basic physical and c	hemical properties	
Physical state:	liquid	
Colour:	light yellow	
Odour:	like: mineral oil.	
Odour threshold:	No data available	
		Test method
Changes in the physical state		
Melting point/freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	No data available	
Pour point:	< -24 °C	DIN ISO 3016
Flash point:	> 230 °C	DIN ISO 2592
Flammability		
Solid/liquid:	Based on available data, the classification criteria are	
	not met.	
Explosive properties		
Based on available data, the classi	fication criteria are not met.	
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Auto-ignition temperature:	> 230 °C	DIN 51794
Decomposition temperature:	No data available	
Oxidizing properties Based on available data, the classi	fication criteria are not met.	
pH-Value:	not applicable	
Viscosity / kinematic: (at 40 °C)	approx. 46 mm²/s	DIN 51562
Water solubility:	practically insoluble	



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46							
Revision date: 28.06.2024			Page 6 of 10				
Vapour pressure: (at 20 °C)	< 0,1 hPa						
Density (at 15 °C):	approx. 0,86 - 0,88 g/cm ³	DIN 51757					
.2. Other information							
Information with regard to physical hazard class	ses						
Sustaining combustion:	No data available						
Other safety characteristics							
Solvent content:	0%						
Further Information							
none							

10.1. Reactivity

No risks worthy of mention.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures. Decompostion takes place from temperatures above: 150 $^\circ C$

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions. Do not mix with: Oxidizing agents, strong.

10.4. Conditions to avoid

storage stability: Do not store at temperatures over: 40 °C This material is combustible, but will not ignite readily. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Carbon dioxide (CO2), Sulphur dioxide (SO2), Phosphorus oxides, Carbon monoxide.

SECTION 11: Toxicological information

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

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Page 7 of 10

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
64742-56-9	Distillates (petroleum), so	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified					
	oral	LD50 > 5000 mg/kg	0	Rat	ECHA Dossier		
	dermal	LD50 > 5000 mg/kg	0	Rabbit	ECHA Dossier		
	inhalation (4 h) dust/mist	LC50 > 5,53 mg/l	3	Rat	ECHA Dossier		

Irritation and corrosivity

Irritant effect on the skin: On short hand contact: non-irritant.

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

Irritant effect on the eye: slightly irritant but not relevant for classification.

Sensitising effects

Respiratory or skin sensitisation: No known symptoms to date.

Carcinogenic/mutagenic/toxic effects for reproduction

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

The mineral oils in the product contain < 3 % DMSO-extract (IP 346).

STOT-single exposure

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

STOT-repeated exposure

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

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

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
64742-56-9	Distillates (petroleum), so	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified					
	Acute fish toxicity	LC50 mg/l	> 100		Pimephales promelas (fathead minnow)	ECHA Dossier	
	Acute algae toxicity	ErC50 mg/l	> 100		Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	> 10000		Daphnia magna (Big water flea)	ECHA Dossier	
	Crustacea toxicity	NOEC	10 mg/l		Daphnia magna (Big water flea)	ECHA Dossier	

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria).



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

Page 8 of 10

CAS No	Chemical name					
	Method Value d Source					
	Evaluation					
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil - unspecified					
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C 2 - 4 % 28 ECHA Dossier					
	Not easily bio-degradable (according to OECD-criteria).					

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

State of matter: liquid at room temperature.

If product enters soil, it will be mobile and may contaminate groundwater

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Discharge into the environment must be avoided. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.

Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)". Dispose of waste according to applicable legislation.

The waste key according to the European Waste Catalogue (EWC number) refers to the real wastes origin and therefore is not product- but use-oriented.

Consult the local waste disposal expert about waste disposal.

Observe mixture permissions according to "Altölverordnung (Waste oil directive)".

List of Wastes Code - residues/unused products

130110 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils; hazardous waste

List of Wastes Code - used product

130110 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Indunorm Hydraulik GmbH

Page 9 of 10

Revision date: 28.06.2024

which cannot be properly cleaned must be disposed of.

SECTION 14: Transport information

Land transport (ADR/RID)	
<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	No
14.6. Special precautions for user	
Handling (Transport information): No	o special precautionary measures are necessary. See protective measures
under point 7 and 8.	
14.7. Maritime transport in bulk according	<u>a to IMO instruments</u>
No information available.	
SECTION 15: Regulatory information	
15.1. Safety, health and environmental re	gulations/legislation specific for the substance or mixture
EU regulatory information	
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
Additional information	
Safety Data Sheet according to Reg	ulation (EC) No 1907/2006 (amended by Regulation (EU) No 2020/878)
National regulatory information	
Water hazard class (D): Additional information	1 - slightly hazardous to water
Restricted to professional users. The receiver of our product is singul addition any national regulations!	arly responsible for adhering to existing laws and regulations. Observe in



according to Regulation (EC) No 1907/2006

Hydrauliköl HLP 46

Revision date: 28.06.2024

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,9,11,12,13,14,15,16.

Relevant H and EUH statements (number and full text)

H304

EUH210

May be fatal if swallowed and enters airways. Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Page 10 of 10