

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 15-5-2018 Revision date: 23-11-2020 Supersedes version of: 1-4-2020 Version: 2.3

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Perlus H 46
Product code	: 08.10.10
Type of product	: Lubricants
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture : Industrial use,Professional use,Consumer use: Hydraulic oil

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Kroon Oil BV Dollegoorweg 15 7602 EC Almelo - Netherlands T 0031 (0)546 81 81 65 vib@kroon-oil.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)	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

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]

EUH-statements

: EUH210 - Safety data sheet available on request.

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: Highly refined mineral oils and additives.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic (Note L)	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	10 – 20	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic (Note L)	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3 (REACH-no) 01-2119487077-29	< 2,5	Asp. Tox. 1, H304

Comments

: The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO 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. This note applies only to certain complex oil-derived substances in Part 3. Full text of H-statements: see section 16

SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 If you feel unwell, seek medical advice (show the label where possible). Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Call a poison center or a doctor if you feel unwell. Do not induce vomiting. 			
4.2. Most important symptoms and effects, both acute and delayed				
Symptoms/effects Symptoms/effects after ingestion	 Not expected to present a significant hazard under anticipated conditions of normal use. May result in aspiration into the lungs, causing chemical pneumonia. 			

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 Unsuitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide. : Do not use a heavy water stream.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Hazardous decomposition products in case of fire	 Combustible liquid. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. 	

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5.3. Advice for firefighters

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, protectiv	e equipment and emergency procedures		
6.1.1. For non-emergency personnel			
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 contai	inment and cleaning up		

Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 Hygiene measures	 Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, includ	ling any incompatibilities
Storage conditions	: Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat.
Storage temperature	: 0-40 °C
7.3. Specific end use(s)	

No additional information available

8.1. Control parameters		
Perlus H 46		
EU - Occupational Exposure Limits		
Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended	5 mg/m ³ - ACGIH TLV (inhalable fraction).	

Appropriate engineering controls:

Ensure good ventilation of the work station.

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Materials for protective clothing:

Wear suitable protective clothing

Hand protection:					
Protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0.35		EN ISO 374

Eye protection:				
Safety glasses				
Туре	Use	Characteristics	Standard	
Safety glasses	Droplet	clear	EN 166	
Skin and body protection:				

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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	Yellow.
Odour	: characteristic.
Odour threshold	: No data available
pН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -39 °C - ASTM D5950 (pour point)
Boiling point	: No data available
Flash point	: 200 °C - ASTM D92 (COC)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	0,858 kg/l (15 °C) - ASTM D4052
Solubility	: Water : Practically not miscible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 46 mm²/s (40 °C) - ASTM D7279
Viscosity, dynamic	: No data available

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Explosive properties Oxidising properties Explosive limits	 Presents no particular fire or explosion hazard. No data available No data available
9.2. Other information	
VOC content	: 0%

SECTION	10 [•] Stability	and reactivity
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10.1. Reactivity

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

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Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with (strong) oxidizers.

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

No decomposition if stored normally.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (dermal)	Not classified Not classified Not classified	
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 Inhalation - Rat (Dust/Mist)	5,53 mg/l/4h	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
LD50 oral rat	> 5000 mg/kg	

> 2000 mg/kg

LC50 Inhalation - Rat	> 5,53 mg/l/4h
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

LD50 dermal rabbit

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STOT-repeated exposure :	Not classified
Distillates (petroleum), hydrotreated light pa	raffinic (64742-55-8)
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
Perlus H 46	
Viscosity, kinematic	46 mm²/s (40 °C) - ASTM D7279

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), hydrotreated light paraffinic (64742-55-8)	
LC50 fish	> 100 mg/l 96h
EC50 Daphnia	> 1000 mg/l
NOEC chronic fish	1000 mg/l 14d
NOEC chronic crustacea	10 mg/l 21d
NOEC chronic algae	≥ 100 mg/l 72h

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 fish	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 Daphnia	> 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)
EC50 Daphnia	> 10000 mg/l (Daphnia magna, 48h) (OECD 202 method)
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
NOEC chronic fish	≥ 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox, 14/28d)
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Persistence and degradability	Not established.
Biodegradation	31 % (OECD 301F method)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Biodegradation	31 % (28d) (OECD 301F method)

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12.3. Bioaccumulative potential		
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		
Partition coefficient n-octanol/water (Log Pow)	> 6	
Bioaccumulative potential	Not established.	
12.4. Mobility in soil		

No additional information available

12.5. Results of PBT and vPvB assessment	
Component	
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods Product/Packaging disposal recommendations European List of Waste (LoW) code	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations. 13 01 10* - mineral based non-chlorinated hydraulic oils

SECTION 14: Transport information

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number	·	· /		•
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippin	g name			•
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o	class(es)	·,		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group		· · · · · · · · · · · · · · · · · · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	ards	· · · · · · · · · · · · · · · · · · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary informatio	n available			

14.6. Special precautions for user

Overland transport Not regulated Transport by sea Not regulated Air transport Not regulated Inland waterway transport Not regulated

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Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 %

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	
	Comments	Modified	
3	Composition/information on ingredients	Modified	
16	Abbreviations and acronyms	Modified	

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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods

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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
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
SDS	Safety Data Sheet
WGK	Water Hazard Class

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II)

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.