

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 15/03/2018 Revision date: 24/10/2022 Supersedes version of: 08/07/2022 Version: 3.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : Mixture Product name : 78790 - Hydraulic Oil HPV 46 Product code : 78790 Type of product : Lubricant Product group : Hydraulic Fluids 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Main use category : Professional 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 B.V. B.V. 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 Emergency number : +31 (0)78 6527652 Monday to Friday: 09:00 - 16:00 (CET)

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]

: EUH210 - Safety data sheet available on request.

2.3. Other hazards

EUH-statements

Contains no PBT/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 is 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 %

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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), 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	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299- 27	50 – 75	Asp. Tox. 1, H304
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889- 13	≥ 25 – < 35	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated 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	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25	3 – 5	Not classified

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 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.
5.2. Special hazards arising from the subs	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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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, protect	ive equipment and emergency procedures	
General measures	: Avoid spilling the product, as this might cause falls.	
6.1.1. For non-emergency personnel		
Protective equipment Emergency procedures	Eliminate all ignition sources if safe to do so.Ventilate spillage area.	
6.1.2. For emergency responders		
Protective equipment	 Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. 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	
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 stor	age
7.1. Precautions for safe handling	
Precautions for safe handling Handling temperature Hygiene measures	 Ensure good ventilation of the work station. Wear personal protective equipment. ≤ 40 °C Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, in	ncluding any incompatibilities
Storage conditions Storage temperature Storage area Special rules on packaging	 Store in a well-ventilated place. Keep cool. 45 °C Store in a well-ventilated place. Store away from heat. Keep only in original container. Store in a closed container.
7 0 On exiting and $1 0 0 1$	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
IOEL STEL	10 mg/m ³
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
IOEL STEL	10 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 mg/m³
WEL STEL (OEL STEL)	10 mg/m ³
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA 5 mg/m ³	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 mg/m³

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 symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

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Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.35	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	: Brown.
Odour	characteristic
Odour threshold	· Not available
Melting point	: Not applicable
Freezing point	: -45 °C ASTM D7346
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 185 °C ASTM D92
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 44 mm²/s @40°C (ASTM D7042)
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 861 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

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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):Acute toxicity (dermal):Acute toxicity (inhalation):	Not classified Not classified Not classified	
Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)	
LD50 oral (rat)	> 5000 mg/kg	
LD50 dermal (rabbit)	> 2000 mg/kg	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h	
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)	
LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test	
LD50 dermal (rabbit)	> 2000 mg/kg 402 Acute Dermal Toxicity Test	
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
Distillates (petroleum), hydrotreated heavy pa	raffinic (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	
. , ,	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	

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight	
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	
Aspiration hazard :	Not classified	
78790 - Hydraulic Oil HPV 46		
Viscosity, kinematic	44 mm²/s @40°C (ASTM D7042)	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)		
Viscosity, kinematic	47 mm²/s	
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
Viscosity, kinematic	150 (1.99 – 847) mm²/s @40°C	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Viscosity, kinematic	109 mm²/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. : Not classified Hazardous to the aquatic environment, short-term (acute) : Not classified Hazardous to the aquatic environment, long-term (chronic) Not rapidly degradable Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) LC50 - Fish [1] > 100 mg/l 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 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 mg/l Scenedesmus quadricauda 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 (72h)

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12.2. Persistence and degradability			
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
Biodegradation	31 % 28 d OECD 301F		
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)			
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % 28 d OECD 301F		
12.3. Bioaccumulative potential			
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
Bioconcentration factor (BCF REACH) 260			
Partition coefficient n-octanol/water (Log Pow)	> 6		
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)			
Partition coefficient n-octanol/water (Log Pow) > 3.5			
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	S
13.1. Waste treatment methods	
Waste treatment methods HP Code	 Dispose of contents/container in accordance with licensed collector's sorting instructions. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

SECTION 14: Transport information

n accordance with ADR / IMDG / IATA / ADN / RID				
IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	
	IMDG umber Not applicable g name Not applicable lass(es)	IMDG IATA umber	IMDG IATA ADN umber Not applicable Not applicable Not applicable Not applicable Not applicable g name Not applicable Not applicable Not applicable Not applicable Not applicable	

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary informatio	n available	· · · · · · · · · · · · · · · · · · ·		

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport Not applicable

Rail transport

Not applicable

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 REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

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.

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

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Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

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
	Revision date	Modified	
	Supersedes	Modified	
9.1	Viscosity, kinematic	Modified	
9.1	Freezing point	Modified	
9.1	Flash point	Modified	
9.1	Density	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	
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	
ΙΑΤΑ	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	

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Abbreviations and acronyms:		
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	
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	
EUH210 Safety data sheet available on request.	
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.