

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 15/03/2018 Revision date: 23/02/2024 Supersedes version of: 27/03/2023 Version: 5.0

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

1.1. Product identifier

Product form : Mixture

Product name : 78760 - Hydraulic Oil HP 46

Product code : 78760

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
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

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

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 %

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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), 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	≥ 55 – < 75	Not classified
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 – < 45	Asp. Tox. 1, H304

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 eye 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.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Will ignite if exposed to intensive heat.

Explosion hazard : Not expected to be a fire/explosion hazard under normal conditions of use. Heat may build

pressure, rupturing closed containers, spreading fire and increasing risk of burns and

injuries.

Reactivity in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other

toxic gases.

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

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5.3. Advice for firefighters

Precautionary measures fire

: Evacuate area.

Eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed Firefighting instructions

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

General measures : Spill area may be slippery. Prevent soil and water pollution. Prevent entry to sewers and

public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid any direct contact with the

product. Stop leaks if it can be done without personal risk.

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

For containment : For large spills, confine the spill in a dike and charge it with wet sand or earth for

subsequent safe disposal.

Methods for cleaning up Take up liquid spill into absorbent material. Clear up spills immediately and dispose of

> waste safely. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation. May be reused following decontamination. Clean contaminated surfaces with an excess of water.

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

Additional hazards when processed : Empty containers retain product residue and can be hazardous.

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe fumes from fires or vapours from decomposition. Avoid breathing dust, fume, gas, mist, spray, vapours. Ensure good ventilation of the work station. Spilled

material may present a slipping hazard. Clean spills promptly.

Handling temperature ≤ 40 °C

Routine housekeeping should be instituted. Do not eat, drink or smoke when using this Hygiene measures

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.

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Storage conditions : Store in a well-ventilated place. Keep cool. Store away from oxidising agents. Protect from sunlight. Store in original container. Always keep in containers made of the same material

as the supply container. Do not store in open, inadequate, mislabled packaging. Opened containers must be carefully closed and kept upright to avoid leakage. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Empty

containers retain product residue and can be hazardous.

Storage temperature : ≤ 40 °C

Information on mixed storage : Store away from strong oxidizers, strong bases, strong acids.

Storage area : Store at ambient temperature.

: Keep container tightly closed and dry.

7.3. Specific end use(s)

Special rules on packaging

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)			
U - Indicative Occupational Exposure Limit (IOEL)			
OEL TWA 5 mg/m³			
OEL STEL 10 mg/m³			
Distillates (petroleum), hydrotreated heavy pa	Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
EU - Indicative Occupational Exposure Limit (IOEL)	EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	DEL TWA 5 mg/m³		
Jnited Kingdom - Occupational Exposure Limits			
/EL 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:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):







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8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection				
TypeField of applicationCharacteristicsStandardSafety glassesDropletclearEN 166				

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection	land protection				
Туре	Thickness (mm)	Penetration	Standard		
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.35		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. amber. : characteristic. Odour Odour threshold : Not available Melting point : Not applicable : -33 °C (ASTM D7346) Freezing point Boiling point : Not available Flammability : Non flammable. 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 : 45 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 : 862 kg/m³ @ 15°C (ASTM D4052)

Relative density : Not available Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

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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

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

Strong oxidizing agents.

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

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) LD50 oral (rat) > 5000 mg/kg		
LC50 inhalation (rat) (Dust/Mist - mg/l/4h) > 5.53 mg/l/4h		

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test > 2000 mg/kg 402 Acute Dermal Toxicity Test > 5000 mg/l/4h	
LD50 dermal (rabbit)		
LC50 inhalation (rat) (mg/l)		
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

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ubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)			
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day		
Distillates (petroleum), hydrotreated heavy pa	raffinic (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			
78760 - Hydraulic Oil HP 46			
Viscosity, kinematic	45 mm²/s @ 40°C (ASTM D7042)		
Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)		
Viscosity, kinematic	47 mm²/s		
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)			
Viscosity, kinematic ≈ 98 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.

Hazardous to the aquatic environment, short–term

icute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

ubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 Daphnia magna	
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)		
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 Pseudokirchneriella subcapitat		
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)		

12.2. Persistence and degradability

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) Biodegradation 31 %		
Persistence and degradability Not readily biodegradable.		

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ı					
ı	Distillator	(notroloum) h	udratraated beauty	paraffinic (64742-54-7)	
ı	Distillates (peu oleulii), ii	iyurulrealeu neavy	parailillic (04/42-04-/)	

Biodegradation 31 % OECD TG 301 F (28d)

12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water (Log Pow) 3.9 – 6

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

Sewage disposal recommendations

Product/Packaging disposal recommendations

European List of Waste (LoW, EC 2000/532) HP Code

 $: \ \, \text{Dispose of contents/container in accordance with licensed collector's sorting instructions}.$

Disposal must be done according to official regulations.

: Recycle product or dispose safely. Recycle the material as far as possible. Recycle or dispose of in compliance with current legislation.

: 13 01 10* - mineral based non-chlorinated hydraulic oils

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

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

ADR	IMDG	IATA	ADN	RID	
4.1. UN number or ID number					
Not regulated for transport					
14.2. UN proper shipping	g name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.3. Transport hazard c	lass(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 haz	ards				
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	
o supplementary information available					

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14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

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

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SECTION 16: Other information

Indication of changes				
Section	Changed item	Change	Comments	
	Revision date	Modified		
	Supersedes	Modified		
5.2	Fire hazard	Added		
5.2	Reactivity in case of fire	Added		
5.2	Explosion hazard	Added		
5.3	Firefighting instructions	Modified		
5.3	Precautionary measures fire	Modified		
6.1	Emergency procedures	Modified		
6.1	General measures	Modified		
6.3	For containment	Modified		
6.3	Methods for cleaning up	Modified		
7.1	Additional hazards when processed	Added		
7.1	Hygiene measures	Modified		
7.1	Precautions for safe handling	Modified		
7.2	Information on mixed storage	Added		
7.2	Storage conditions	Modified		
7.2	Storage area	Modified		
7.2	Special rules on packaging	Modified		
9.1	Colour	Modified		
13.1	Sewage disposal recommendations	Added		
13.1	Waste disposal recommendations	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	

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Abbreviations and acronyms:		
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	
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.