QUANTUM® HYDROIL HVLP-46

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Issue date: 5/1/2020 Supersedes version of: 8/15/2018

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

1.1. Product identifier

Product form : Mixture

Product name : QUANTUM® Hydroil HVLP-46

Product code : H003/07

Type of product : Hydraulic Fluids,Use in lubricants

Synonyms : Hydraulic Oils

Product group : Blend

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

1.2.1. Relevant identified uses

Main use category : Consumer use,Professional use

Industrial/Professional use spec : Distribution
Formulation & (re)packing of substances and mixtures
Use in functional fluids

Function or use category : Hydraulic Fluids

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

QUANTUM LUBRICANTS

G. Karamichalis & CO EE

35 D. Gounari Str.

165 62 Glyfada - Greece

T + 30 210 963 85 10

quantum@quantum-oils.com - http://www.quantum-oils.com

1.4. Emergency telephone number

Emergency number : +30 210 779 37 77

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

Other hazards not contributing to the classification : None under normal conditions.

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : CLP Calculation method

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (REACH-no) 01-2119484627-25-0035; 01-2119484627-25-0025;01-2119471299-27-0019	< 100	Not classified

Distillates (petroleum), solvent-dewaxed heavy paraffinic	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7 (REACH-no) 01-2119471299-27-0016;01-2119471299-27-0003	< 100	Not classified
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	(CAS-No.) 4259-15-8 (EC-No.) 224-235-5 (REACH-no) 01-2119493635-27	< 0.4	Eye Dam. 1, H318 Aquatic Chronic 2, H411
2,6-di-tert-butylphenol	(CAS-No.) 128-39-2 (EC-No.) 204-884-0 (REACH-no) 01-2119490822-33	< 0.2	Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Comments : 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

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Give oxygen or artificial respiration if necessary. Remove person to fresh air and keep comfortable for breathing. Get immediate medical advice/attention.

First-aid measures after skin contact : Wash skin with plenty of water. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Immediately call a POISON CENTER/doctor. Rinse mouth out with water. Do not induce vomiting/risk of damage to lungs exceeds poisoning risk.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : May cause drowsiness or dizziness. May cause headache, nausea and irritation of respiratory tract.

Symptoms/effects after skin contact : Contact during a long period may cause light irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : May cause slight irritation. redness, itching, tears.

Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting. Risk of lung oedema.

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 heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

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

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area. Eliminate all ignition sources if safe to do so.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it. Eliminate every possible source of ignition. Do not handle until all safety precautions have been read and understood. Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapours. No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

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".

Emergency procedures : Ventilate area. Stop release. Cover spill with non combustible material, e.g.: sand/earth. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

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

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing mist, vapours. Wear personal protective equipment.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible products : Oxidizing agent.

Incompatible materials : Sources of ignition.

7.3. Specific end use(s)

Product information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

EU - Occupational Exposure Limits	
IOELV TWA (mg/m³)	5 mg/m³
IOELV STEL (mg/m³)	10 mg/m³

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

EU - Occupational Exposure Limits	
IOELV TWA (mg/m³)	5 mg/m³
IOELV STEL (mg/m³)	10 mg/m³

2,6-di-tert-butylphenol (128-39-2)

DNEL/DMEL (General population)	
Long-term - systemic effects,oral	6.75 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	20.9 mg/m³
Long-term - systemic effects, dermal	11.25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.001 mg/l
PNEC aqua (intermittent, freshwater)	0.004 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.317 mg/kg dwt

2,6-di-tert-butylphenol (128-39-2)	
PNEC sediment (marine water)	0.032 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.063 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Protective clothing. Protective goggles.

Hand protection:
protective gloves: neoprene gloves, PVA. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). EN 420

Eye protection:
Safety glasses. EN 166. EN 168

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. EN 405

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
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -35 °C
Boiling point	: > 315 °C
Flash point	: 220 °C
Auto-ignition temperature	: > 315 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: < 10 Pa
Relative vapour density at 20 °C	: > 1
Relative density	: No data available
Density	: 0.875 g/ml @20°C
Solubility	: soluble in most organic solvents.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 46.5 mm²/s @40°C
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.

Explosive limits	: No data available

9.2. Other information

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). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

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 toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403 method)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403 method)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
Carcinogenicity	: This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
Reproductive toxicity	: This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified

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Viscosity, kinematic	46.5 mm²/s @40°C

Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 fish 1	> 100 mg/l (OECD 203 method)
EC50 Daphnia 1	> 10000 mg/l (OECD 202 method)
EC50 72h algae (1)	> 1000 mg/l (OECD 201 method)
NOEL, aquatic invertebrates, Chronic	< 1 mg/l (21 days, (OECD 211 method))
NOEL, algae, Chronic	> 100 mg/l (72 Hours, (OECD 201 method))
NOEL, microorganisms, Chronic	> 1.93 mg/l (10 minutes, DIN 38412)
NOEL, daphnia, Chronic	> 10 mg/l (21 days)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LC50 fish 1	> 100 mg/l (OECD 203 method)
EC50 Daphnia 1	> 10000 mg/l (OECD 202 method)
EC50 72h algae (1)	> 1000 mg/l (OECD 201 method)
NOEL, aquatic invertebrates, Chronic	< 1 mg/l (21 days, (OECD 211 method))
NOEL, algae, Chronic	> 100 mg/l (72 Hours, (OECD 201 method))
NOEL, microorganisms, Chronic	> 1.93 mg/l (10 minutes, DIN 38412)
NOEL, daphnia, Chronic	> 10 mg/l (21 days)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
LC50 fish 1	4.4 mg/l (OECD 203 method)
EC50 Daphnia 1	> 65 mg/l (OECD 202 method)
EC50 72h algae (1)	240 mg/l
NOEC chronic algae	410 mg/l (OECD 201 method)

2,6-di-tert-butylphenol (128-39-2)	
LC50 fish 1	≥ 0.469 mg/l (OECD 203 method)
EC50 Daphnia 1	0.45 mg/l (OECD 202 method)
ErC50 (algae)	≈ 0.423 mg/l (OECD 202 method)

12.2. Persistence and degradability

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Persistence and degradability	Not readily biodegradable, according to appropriate OECD test due to properties of several components.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Not readily biodegradable, according to appropriate OECD test due to properties of several components.
Biodegradation	< 32 % (OECD 301B method)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Persistence and degradability	Not readily biodegradable, according to appropriate OECD test due to properties of several components.
Biodegradation	< 32 % (OECD 301B method)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
Biodegradation	< 5 % (OECD 301D method)

12.3. Bioaccumulative potential

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Bioaccumulative potential	Bioaccumulative potential.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Partition coefficient n-octanol/water (Log Kow)	3.5 – 6 Moderately bioaccumulative

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Partition coefficient n-octanol/water (Log Kow)	3.5 – 6 Moderately bioaccumulative

2,6-di-tert-butylphenol (128-39-2)	
Partition coefficient n-octanol/water (Log Pow)	4.92 highly bioaccumulative

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

QUANTUM® Hydroil HVLP-46
PBT: not relevant – no registration required
vPvB: not relevant – no registration required

Component	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	PBT: not relevant – no registration required vPvB: not relevant – no registration required
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	PBT: not relevant – no registration required vPvB: not relevant – no registration required

12.6. Other adverse effects

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Avoid release to the environment.

European List of Waste (LoW) code : 13 01 10* - mineral based non-chlorinated hydraulic oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard 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 hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information 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

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

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out
Distillates (petroleum), hydrotreated heavy paraffinic Distillates (petroleum), solvent-dewaxed heavy paraffinic

SECTION 16: Other information

Indication of changes:
Firefighting measures. Classification of the substance or mixture. First aid measures. Accidental release measures.

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
IATA	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
PBT	Persistent Bioaccumulative Toxic

PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

SDS design

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.