

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**HIGHTEC HLP 46 ZAF**

Revision date: 06.04.2023

Product code: 30206

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

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

Hydraulic fluids

**1.3. Details of the supplier of the safety data sheet**

Company name:	ROWE Mineralölwerk GmbH	
Street:	Langgewann 101	
Place:	D-67547 Worms	
Telephone:	+49 (0)6241 5906-0	Telefax: +49 (0)6241 5906-999
E-mail:	info@rowe-oil.com	
Contact person:	Product Compliance	
E-mail:	sdb@rowe-oil.com	
Internet:	www.rowe-oil.com	

**1.4. Emergency telephone number:**

Ireland: Public (8am-10pm) +353 180 921 66, Healthcare Professionals +353 1809 2566 other Countries: Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P103	Read carefully and follow all instructions.
P273	Avoid release to the environment.
P501	Dispose of contents/container to of the disposal according to local regulations.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

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**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
128-39-2	2,6-di-tert-butylphenol			0.1 - < 0.3 %
	204-884-0		01-2119490822-33	
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H315 H400 H410			
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines			< 0.1 %
	627-034-4		01-2119473797-19	
	Acute Tox. 4, Skin Corr. 1B, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H335 H373 H304 H400 H410			
	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl			< 0.1 %
	701-068-0		01-2119473798-17	
	Acute Tox. 4, Skin Corr. 1B, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H335 H373 H304 H400 H410			

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

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
128-39-2	204-884-0	2,6-di-tert-butylphenol	0.1 - < 0.3 %
	oral: LD50 = > 5000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1		
1213789-63-9	627-034-4	C16-18-(even numbered, saturated and unsaturated)-alkylamines	< 0.1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1689 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		
	701-068-0	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	< 0.1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1300 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		

**Further Information**

According to EC directives or the corresponding national regulations the product does not have to be labelled.

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink 1 glass of water.

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

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures**
**5.1. Extinguishing media**

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**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**5.2. Special hazards arising from the substance or mixture**

Non-flammable.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Avoid contact with skin, eyes and clothes. Do not breathe mist/vapours/spray.

**For non-emergency personnel**

Provide adequate ventilation. Use personal protection equipment. Remove persons to safety.

**For emergency responders**

Wear personal protection equipment (refer to section 8).

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For containment**

Stop leak if safe to do so. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

**For cleaning up**

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.

**Other information**

Clean contaminated articles and floor according to the environmental legislation.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

No special measures are necessary.

**7.3. Specific end use(s)**

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**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
128-39-2	2,6-di-tert-butylphenol			
Worker DNEL, long-term		inhalation	systemic	70,61 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	11,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	20,9 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	6,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,75 mg/kg bw/day
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines			
Worker DNEL, long-term		inhalation	systemic	0,38 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	0,035 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl			
Worker DNEL, long-term		inhalation	systemic	0,38 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	0,035 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day

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**PNEC values**

CAS No	Substance	Value
Environmental compartment		
128-39-2	2,6-di-tert-butylphenol	
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0,004 mg/l
Marine water		0 mg/l
Freshwater sediment		0,317 mg/kg
Marine sediment		0,032 mg/kg
Secondary poisoning		60 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,697 mg/kg
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines	
Freshwater		0,00026 mg/l
Freshwater (intermittent releases)		0,0016 mg/l
Marine water		0,000026 mg/l
Freshwater sediment		3,76 mg/kg
Marine sediment		0,376 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,55 mg/l
Soil		10 mg/kg
Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl		
Freshwater		0,00026 mg/l
Freshwater (intermittent releases)		0,0016 mg/l
Marine water		0,000026 mg/l
Freshwater sediment		3,76 mg/kg
Marine sediment		0,376 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,55 mg/l
Soil		10 mg/kg

**8.2. Exposure controls**
**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Wear eye/face protection.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Use of protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls**

Avoid release to the environment.

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**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	brown	
Odour:	characteristic	
		<b>Test method</b>
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
Flammability:	Not readily combustible.	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	>230 °C	DIN ISO 2592
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value:	not applicable	DIN 51369
Viscosity / kinematic: (at 40 °C)	~ 46 mm <sup>2</sup> /s	DIN 51562
Water solubility: (at 20 °C)	practically insoluble	
Solubility in other solvents Soluble in hydrocarbons (mineral oil.)		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure: (at 20 °C)	>0,1 hPa	calculated.
Density (at 15 °C):	~ 0,863 g/cm <sup>3</sup>	DIN 51757
Relative vapour density:	not determined	
Particle characteristics:	not relevant	

**9.2. Other information**
**Other safety characteristics**

Pour point:	~ -30 °C
Pourpoint::	DIN ISO 3016

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**SECTION 11: Toxicological information**

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**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) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
128-39-2	2,6-di-tert-butylphenol				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1991)	OECD Guideline 401
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines				
	oral	LD50 1689 mg/kg	Rat	Study report (1993)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1985)	OECD Guideline 402
	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl				
	oral	LD50 1300 mg/kg	Rat	Study report (1983)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1985)	OECD Guideline 402

**Irritation and corrosivity**

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

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**STOT-single exposure**

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

**STOT-repeated exposure**

 Based on available data, the classification criteria are not met.  
 Frequently or prolonged contact with skin may cause dermal irritation.

**Aspiration hazard**

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

**11.2. Information on other hazards**
**Other information**

No information available.

**SECTION 12: Ecological information**
**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

Harmful to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
128-39-2	2,6-di-tert-butylphenol					
	Acute crustacea toxicity	EC50 mg/l	0,45	48 h	Daphnia magna	REACH Registration Dossier
	Crustacea toxicity	NOEC mg/l	0,035	21 d	Daphnia magna	REACH Registration Dossier OECD Guideline 211

#### **12.3. Bioaccumulative potential**

The product has not been tested.

#### **Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
128-39-2	2,6-di-tert-butylphenol	4,5
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines	5,16
	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	5,16

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
128-39-2	2,6-di-tert-butylphenol	135 - 360	Cyprinus carpio	Publication (1992)
1213789-63-9	C16-18-(even numbered, saturated and unsaturated)-alkylamines	173		Environmental Toxico
	Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	173		Environmental Toxico

#### **12.4. Mobility in soil**

The product has not been tested.

#### **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**

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. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### **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



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#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### Additional information

According to EC directives or the corresponding national regulations the product does not have to be labelled.

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

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

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#### SECTION 16: Other information

##### Changes

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

##### Abbreviations and acronyms

Acute Tox: Acute toxicity

Asp. Tox: Aspiration hazard

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

STOT SE: Specific target organ toxicity - single exposure

STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

##### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

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**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**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 receiver of our product is singularly responsible for adhering to existing laws and regulations.

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