

according to Regulation (EC) No 1907/2006

HIGHTEC Chainlube

Revision date: 08.09.2020

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

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UFI: SX9N-QMWW-4000-HTGE

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

Lubricant, lubricants and release products

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	
Internet:	www.rowe-oil.com	
Responsible Department:	sdb@rowe-oil.com	

1.4. Emergency telephone number: Giftnotruf Mainz (DE; E) +49 (0)6131-19240

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

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes

Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes

n-hexane

Signal word: Danger**Pictograms:****Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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P302+P352	IF ON SKIN: Wash with plenty of water.
P211	Do not spray on an open flame or other ignition source.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to of the disposal according to local regulations.

Special labelling of certain mixtures

90 % by mass of the contents are flammable.

2.3. Other hazards

Vapours may form explosive mixtures with air. Harmful: may cause lung damage if swallowed.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	GHS Classification	
75-28-5	isobutane	10-30 %
	200-857-2	01-2119485395-27
	Flam. Gas 1, Compressed gas; H220 H280	
74-98-6	propane	10-30 %
	200-827-9	601-003-00-5
	01-2119486944-21	
	Flam. Gas 1, Compressed gas; H220 H280	
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	1-10 %
	927-510-4	01-2119475515-33
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
64742-49-0	Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes	1-10 %
	927-510-4	01-2119475515-33
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
106-97-8	butane	1-10 %
	203-448-7	601-004-00-0
	01-2119474691-32	
	Flam. Gas 1, Compressed gas; H220 H280	
110-54-3	n-hexane	<1 %
	203-777-6	601-037-00-0
	01-2119480412-44	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

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After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician in any case!

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

Frequently or prolonged contact with skin may cause dermal irritation.

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 jet, Carbon dioxide (CO₂), Foam, Extinguishing powder, alcohol resistant foam, Water spray.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. 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**

Remove all sources of ignition. Provide adequate ventilation. Wear a self-contained breathing apparatus and chemical protective clothing.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

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**

Do not pierce or burn, even after use. Ensure adequate ventilation of the storage area.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary

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measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Lubricant, lubricants and release products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes			
Worker DNEL,		dermal	systemic	300 mg/kg bw/day
64742-49-0	Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes			
Worker DNEL,		dermal	systemic	300 mg/kg bw/day

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation of the storage area. Keep away from sources of ignition - No smoking.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye protection/face protection. Tightly sealed safety glasses.

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. Wear protective gloves.

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Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing . . Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. In case of fire: Wear self-contained breathing apparatus.

Environmental exposure controls

Floors should be impervious, resistant to liquids and easy to clean.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	whitish
Odour:	characteristic

Test method

pH-Value:	not determined
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Changes in the physical state

Melting point:	not determined
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Flash point:	~ -80 °C
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Flammability

Solid:	not applicable
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Gas:	not determined
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Explosive properties

Heating may cause an explosion.

Lower explosion limits:	1,4 vol. %
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Upper explosion limits:	13 vol. %
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Ignition temperature:	>200 °C
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Auto-ignition temperature

Solid:	not applicable
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Gas:	not determined
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Decomposition temperature:	not determined
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Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
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Density (at 15 °C):	~ 0,864 g/cm³ DIN 51757
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Water solubility:	sparingly soluble.
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Solubility in other solvents

miscible with most organic solvents, Acetone

Partition coefficient:	VOC g/l: 173
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

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10.1. Reactivity

Extremely flammable aerosol. This product is stable under normal conditions. Hazardous reactions are unlikely.

10.2. Chemical stability

This product is stable under normal conditions. Hazardous reactions are unlikely.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Remove all sources of ignition. Protect against direct sunlight.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Hazardous decomposition products: Gas/vapours, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes				
	oral	LD50 >5840 mg/kg	Rat		
	dermal	LD50 >2920 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 >23,3 mg/l	Rat		
64742-49-0	Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes				
	oral	LD50 >5840 mg/kg	Rat		
	dermal	LD50 >2920 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 >23,3 mg/l	Rat		

Sensitising effects

Frequently or prolonged contact with skin may cause dermal irritation.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

Daphnia magna 48h EC50 1-10 mg/l

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes					
	Acute fish toxicity	LC50 mg/l	13,4	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC mg/l	1,534	28 d	Oncorhynchus mykiss (Rainbow trout)	
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	
64742-49-0	Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes					
	Acute fish toxicity	LC50 mg/l	13,4	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC mg/l	1,534	28 d	Oncorhynchus mykiss (Rainbow trout)	
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	
110-54-3	n-hexane					
	Acute fish toxicity	LC50	2,5 mg/l	96 h	Pimephales promelas	Geiger et al. 1990

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria).

12.3. Bioaccumulative potential

Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
74-98-6	propane	2,36
106-97-8	butane	2,89
110-54-3	n-hexane	3,9

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Toxic to aquatic organisms.

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. Send to a physico-chemical treatment facility under observation of official regulations. Following consultation with waste management company and after physico-chemical pre-treatment, landfill together with household waste.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

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List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

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)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS (propane / isobutane)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS (propane / isobutane)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS (isobutane / propane)
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
 Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959
 Limited quantity: 1000 mL

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Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: n-hexane

Entry 28: isobutane; Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes; Hydrocarbons, C6-7, n-alkanes, isoalkanes, cycloalkanes; butane

2004/42/EC (VOC): 173 g/l
Information according to 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS

Additional information

Aerosol directive (75/324/EEC).

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): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

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This data sheet contains changes from the previous version in section(s): 2,9,14.

Abbreviations and acronyms

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
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

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

Classification	Classification procedure
Aerosol 1; H222-H229	
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.

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H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	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.

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