

Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC SYNTH RS 2-T

Revision: 02.02.2026

Product code: 20032

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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**

2-T Motor oil / 2-Stroke engine oil

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**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements**Regulation (EC) No 1272/2008****Special labelling**

EUH208	Contains C14-C16-C18 Alkylphenole. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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)			
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (international CAS 68551-20-2)			5 - < 15 %
	934-954-2		01-2119826592-36	
	Asp. Tox. 1; H304			
869062-45-3	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics			5 - < 15 %
	920-107-4		01-2119453414-43	
	Asp. Tox. 1; H304 EUH066			
1190625-94-5	C14-C16-C18 Alkylphenole			0.3 - < 1 %
	931-468-2		01-2119498288-19	
	Skin Sens. 1, STOT RE 2; H317 H373			

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		
1174522-45-2	934-954-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (international CAS 68551-20-2)	5 - < 15 %
	oral: LD50 = > 5000 mg/kg		
869062-45-3	920-107-4	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	5 - < 15 %
	dermal: LD50 = > 3160 mg/kg; oral: LD50 = > 15000 mg/kg		

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Water spray jet. Foam. Carbon dioxide (CO₂).
Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Combustible. Non-flammable.
In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂), Pyrolysis products, toxic.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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**

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

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 uncontrolled discharge of product into the environment.

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

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

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**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with eyes and skin. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. 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 in a cool, well-ventilated place. Store in a dry place.

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Hints on joint storage

Do not store together with: Oxidizing agent, Reducing agent, Strong acid, Strong alkali.

Further information on storage conditions

Keep away from heat.

maximum storage temperature: 80 °C

7.3. Specific end use(s)

2-T Motor oil / 2-Stroke engine oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
-	Mineral Oil pure, highly & severely refined (Inhalable)	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified (Note L)			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m ³
1190625-94-5	C14-C16-C18 Alkylphenole			
Worker DNEL, long-term		inhalation	systemic	1,17 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day

PNEC values

CAS No	Substance	Value
	Environmental compartment	
1190625-94-5	C14-C16-C18 Alkylphenole	
Freshwater		0,1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,01 mg/l
Freshwater sediment		4266,16 mg/kg
Marine sediment		426,62 mg/kg
Secondary poisoning		3,3 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		852,58 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment

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Eye/face protection

Wear eye protection/face protection. (EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374)

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

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

No information available.

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:	amber
Odour:	characteristic
Odour threshold:	not determined

	Test method
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:	138 °C DIN ISO 2592
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not applicable
Viscosity / kinematic: (at 40 °C)	~ 70 mm ² /s ASTM D 7042
Water solubility:	practically insoluble
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	0,002 hPa calculated.
Density (at 15 °C):	~ 0,866 g/cm ³ ASTM D 7042
Relative vapour density:	not determined
Particle characteristics:	not relevant

9.2. Other information

Other safety characteristics

Pour point: ~ -29 °C DIN EN ISO 3016

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No information available.

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

Oxidizing agent, Reducing agent, Strong acid, Strong alkali.

10.6. Hazardous decomposition products

 In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂), Pyrolysis products, toxic.

SECTION 11: Toxicological information
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) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (international CAS 68551-20-2)				
	oral	LD50 > 5000 mg/kg	Rat	ECHA	OECD Guideline 401
869062-45-3	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 > 15000 mg/kg	Rat	Study report (1977)	OECD Guideline 401
	dermal	LD50 > 3160 mg/kg	Rabbit	Study report (1984)	OECD Guideline 402

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Contains C14-C16-C18 Alkylphenole. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

STOT-single exposure

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

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STOT-repeated exposure

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

Aspiration hazard

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

Information on likely routes of exposure

Inhalation, oral, Skin contact, Eye contact.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Practical experience

not applicable

11.2. Information on other hazards
Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No information available.

SECTION 12: Ecological information
12.1. Toxicity

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

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (international CAS 68551-20-2)					
	Acute fish toxicity	LL50 > 1028 mg/l	96 h	Scophthalmus maximus	ECHA	
	Acute algae toxicity	ErC50 > 10000 mg/l	72 h	Skeletonema costatum	ECHA	ISO 10253
	Acute crustacea toxicity	EL50 > 3190 mg/l	48 h	other aquatic arthropod: Acartia tonsa	ECHA	ISO 14669
	Fish toxicity	NOEC > 1000 mg/l	28 d	Oncorhynchus mykiss	ECHA	
	Crustacea toxicity	NOEC > 1000 mg/l	21 d	Daphnia magna	ECHA	
	Acute bacteria toxicity	EC50 > 100 mg/l ()	3 h	activated sludge of a predominantly domestic sewage	ECHA	OECD Guideline 209
869062-45-3	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics					
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration Dossier	OECD Guideline 201
	Crustacea toxicity	NOEC > 1000 mg/l	21 d	Daphnia magna (Big water flea)	REACH Registration Dossier	The aquatic toxicity was estimated by a

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
869062-45-3	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	>= 5,03
1190625-94-5	C14-C16-C18 Alkylphenole	> 16000000

BCF

CAS No	Chemical name	BCF	Species	Source
869062-45-3	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	>= 207,7		REACH Registration D

12.4. Mobility in soil

No data available.

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

Avoid release to the environment.

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

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

List of Wastes Code - used product

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

List of Wastes Code - contaminated packaging

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information
Land transport (ADR/RID)

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

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
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14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: 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 75

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

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

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

Additional information

Observe in addition any national regulations!

15.2. Chemical safety assessment

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

SECTION 16: Other information
Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,9,10,11,13,14,15,16.

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Abbreviations and acronyms

Asp. Tox. 1: Aspiration hazard, hazard category 1
 Skin Sens. 1: Skin sensitisation, hazard category 1
 STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2
 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).

Key literature references and sources for data

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). (v.1.2, 2013)

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H373	May cause damage to liver through prolonged or repeated exposure if inhaled.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains C14-C16-C18 Alkylphenole. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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

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for adhering to existing laws and regulations. The above data are intended to describe our product in terms of any safety requirements to be observed. They reflect the state of our current knowledge and experience and shall not be construed as warranted characteristics. Any warranty for accuracy and completeness shall be expressly excluded.

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