

Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC SYNT RS SAE 5W-30 HC-FO

Revision date: 09.01.2018

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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

Motor oil

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|--------------------------|-------------------------------|
| Company name: | ROWE MINERALOELWERK GMBH | |
| Street: | Langgewann 101 | |
| Place: | D-67547 Worms | |
| Telephone: | +49 (0)6241 5906-0 | Telefax: +49 (0)6241 5906-999 |
| e-mail: | info@rowe-mineraloel.com | |
| Internet: | www.rowe-mineraloel.com | |
| Responsible Department: | Kundenservice | |

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:

Respiratory or skin sensitisation: Skin Sens. 1B

Hazard Statements:

May cause an allergic skin reaction.

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

C14-C16-C18 Alkylphenole

Signal word: Warning

Pictograms:

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

| | |
|-----------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P501 | Dispose of contents/container to of the disposal according to local regulations. |

2.3. Other hazards

No data available

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SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

| CAS No | Chemical name | Quantity |
|------------|---|-------------|
| | EC No | |
| | Index No | |
| | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| 72623-87-1 | Baseoil - unspecified, Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | 30 - < 60 % |
| | 276-738-4 | |
| | 649-483-00-5 | |
| | 01-2119474889-13 | |
| | Asp. Tox. 1; H304 | |
| 93819-94-4 | Zinc bis[O-(6-methylheptyl)]bis[O-(secbutyl)]bis(dithiophosphate) | 1 - < 2.5 % |
| | 298-577-9 | |
| | 01-2119543726-33 | |
| | Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2; H315 H318 H411 | |
| 36878-20-3 | Bis(nonylphenyl)amine | 1 - < 2.5 % |
| | 253-249-4 | |
| | 01-2119488911-28 | |
| | Aquatic Chronic 4; H413 | |
| | C14-C16-C18 Alkylphenole | 1 - < 2.5 % |
| | 931-468-2 | |
| | 01-2119498288-19 | |
| | Skin Sens. 1B, STOT RE 2; H317 H373 | |

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

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

Self-protection of the first aider

Change contaminated clothing.

Do not put any product-impregnated cleaning rags into your trouser pockets.

After inhalation

In case of inhalation of aerosols/spray mist/splash spots: Consult physician. Provide fresh air.

Avoid breathing dust/fume/gas/mist/vapours/spray. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of inhalation of aerosols/spray mist/splash spots: Consult physician.

After contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes

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

In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

No data available

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

Caution if victim vomits: Risk of aspiration!

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Aspiration hazard: Call a physician immediately.

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

Co-ordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO₂). Dry extinguishing powder. Foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance itself, combustion products, resulting gases:
Carbon dioxide (CO₂). Carbon monoxide Sulphur oxides. Phosphorus oxides. Hydrogen sulphide (H₂S). The product itself does not burn.

5.3. Advice for firefighters

carbon black In case of fire: Wear self-contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes.
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.
Dispose of waste according to applicable legislation.
Use water spray jet to protect personnel and to cool endangered containers.

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

Special danger of slipping by leaking/spilling product.
Wear suitable protective clothing.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Protect skin by using skin protective cream. Wash hands before breaks and after work.
Conditions to avoid: aerosol or mist generation.

Advice on protection against fire and explosion

No special measures are necessary.
When using do not smoke.
Fire class: B (DIN-/EN-Norms: EN2)

Further information on handling

No data available

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep container tightly closed.
Keep away from heat. Keep/Store only in original container.

Hints on joint storage

Do not store together with: Food and fodder, Oxidizing agents.

Further information on storage conditions

If product enters soil, it will be mobile and may contaminate groundwater. Keep away from heat.

7.3. Specific end use(s)

Motor oil

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

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|-----------------------|----------------|----------|------------------------|
| 36878-20-3 | Bis(nonylphenyl)amine | | | |
| Consumer DNEL, long-term | | inhalation | systemic | 1,09 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 0,31 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 0,31 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 4,37 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 0,62 mg/kg bw/day |

PNEC values

| CAS No | Substance | Value |
|------------|--|--------------|
| 36878-20-3 | Bis(nonylphenyl)amine | |
| | Micro-organisms in sewage treatment plants (STP) | 1 mg/l |
| | Soil | 263000 mg/kg |
| | Marine sediment | 13200 mg/kg |
| | Freshwater sediment | 132000 mg/kg |
| | Marine water | 0,01 mg/l |
| | Freshwater | 0,1 mg/l |

Additional advice on limit values

No data available

8.2. Exposure controls
Appropriate engineering controls

No data available

Protective and hygiene measures

When using do not eat, drink or smoke.
Change contaminated clothing.
Wash hands before breaks and after work.
Protect skin by using skin protective cream.
Keep away from food, drink and animal feedingstuffs.

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Do not breathe vapour.

Eye/face protection

In fine dispersion/spraying/misting: Wear eye/face protection.

Hand protection

Wear suitable gloves.

Skin protection

In fine dispersion/spraying/misting: Wear protective gloves/protective clothing.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour: light brown
 Odour: characteristic

| | |
|-----------|--------------------------|
| | Test method |
| pH-Value: | not applicable DIN 51369 |

Changes in the physical state

| | | |
|--------------|---------|--------------|
| Pourpoint:: | ~-36 °C | DIN ISO 3016 |
| Flash point: | >195 °C | DIN ISO 2592 |

| | |
|-------------------------|-----------|
| Lower explosion limits: | Literatur |
| Upper explosion limits: | Literatur |

Ignition temperature: No data available

| | | |
|--------------------------------|----------|-------------|
| Vapour pressure: (at 20 °C) | <0,1 hPa | calculated. |
|--------------------------------|----------|-------------|

| | | |
|---------------------|------------------------|-----------|
| Density (at 15 °C): | 0,85 g/cm ³ | DIN 51757 |
|---------------------|------------------------|-----------|

| | |
|---------------------------------|-----------------------|
| Water solubility: (at 20 °C) | practically insoluble |
|---------------------------------|-----------------------|

Solubility in other solvents

Soluble in hydrocarbons (mineral oil.)

| | | |
|---------------------------------------|-------------------------|-----------|
| Viscosity / kinematic: (at 100 °C) | 10,2 mm ² /s | DIN 51562 |
|---------------------------------------|-------------------------|-----------|

Solvent separation test: No data available

Solvent content: none Solvents

9.2. Other information

| | |
|----------------|---|
| Solid content: | 0 |
| none | |

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No thermal decomposition if properly stored / handled /transported.
 Onset of decomposition at elevated temperatures (>65°C): (e.g. H2S)

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10.3. Possibility of hazardous reactions

possible with strong oxidizing agents.

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

10.4. Conditions to avoid

Oxidizing agents, strong..Etchant and acids

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

none

Further information

No thermal decomposition if properly stored / handled /transported.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

No data available.

Irritant effect on the respiratory tract: Do not breathe gas/vapour.

| CAS No | Chemical name | | | | |
|------------|---|------------------|---------|----------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 93819-94-4 | Zinc bis[O-(6-methylheptyl)]bis[O-(secbutyl)]bis(dithiophosphate) | | | | |
| | oral | LD50 2600 mg/kg | | | |
| | dermal | LD50 >3160 mg/kg | | OECD 402 | |
| 36878-20-3 | Bis(nonylphenyl)amine | | | | |
| | oral | LD50 >5000 mg/kg | Rat | OECD 401 | |
| | dermal | LD50 >2000 mg/kg | Rabbit | OECD 402 | |

Irritation and corrosivity

Irritant effect on the skin: none

Frequent and prolonged eye contact may cause eye irritation.

Sensitising effects

Due to the very low concentration of sensitizing substances, the finished product can be assumed not to be skin-sensitizing.

Carcinogenic/mutagenic/toxic effects for reproduction

The product is not classified.

STOT-repeated exposure

Frequently or prolonged contact with skin may cause dermal irritation.

Specific effects in experiment on an animal

No data available.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Practical experience

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Observations relevant to classification

not applicable

Other observations

Has de-greasing effect on the skin.

Further information

No special hazards known when the product is properly used and the precautionary measures indicated are observed.

SECTION 12: Ecological information
12.1. Toxicity

No data available.

| CAS No | Chemical name | | | | | |
|------------|---|--------------------|-----------|-------------------------------------|----------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 72623-87-1 | Baseoil - unspecified, Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | | | | | |
| | Acute fish toxicity | LC50 > 100 mg/l | 96 h | | OECD 203 | |
| | Acute algae toxicity | ErC50 >= 100 mg/l | 72 h | | OECD 201 | |
| | Acute crustacea toxicity | EC50 > 10 000 mg/l | 48 h | | OECD 202 | |
| 93819-94-4 | Zinc bis[O-(6-methylheptyl)]bis[O-(secbutyl)]bis(dithiophosphate) | | | | | |
| | Acute fish toxicity | LC50 4,5 mg/l | 96 h | Oncorhynchus mykiss (Rainbow trout) | OECD 203 | |
| | Acute algae toxicity | ErC50 2,1 mg/l | 96 h | Selenastrum capricornutum | OECD 201 | |
| | Acute crustacea toxicity | EC50 5,4 mg/l | 48 h | Daphnia magna | OECD 202 | |
| 36878-20-3 | Bis(nonylphenyl)amine | | | | | |
| | Acute fish toxicity | LC50 >100 mg/l | 96 h | Brachydanio rerio (zebra-fish) | OECD 203 | |
| | Acute algae toxicity | ErC50 600 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD 201 | |
| | Acute crustacea toxicity | EC50 >100 mg/l | 48 h | Daphnia magna | OECD 202 | |

12.2. Persistence and degradability

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants. Poorly eliminated from water.

Not easily bio-degradable (according to OECD-criteria). Product is partially biodegradable. Significant residues remain.

Post-use oils must not be discharged into the sewer system or into surface waters nor must they be allowed to enter the soil.

| CAS No | Chemical name | | | |
|------------|---|-------|----|--------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 93819-94-4 | Zinc bis[O-(6-methylheptyl)]bis[O-(secbutyl)]bis(dithiophosphate) | | | |
| | OECD 301 B | 1,5% | 28 | |
| | Not easily bio-degradable (according to OECD-criteria). | | | |
| 36878-20-3 | Bis(nonylphenyl)amine | | | |
| | Aerobic biological treatment | 1% | 28 | |
| | Not easily bio-degradable (according to OECD-criteria). | | | |

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12.3. Bioaccumulative potential

No data available.

Do not allow uncontrolled discharge of product into the environment.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|------------|---|---------|
| 72623-87-1 | Baseoil - unspecified, Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | > 6 |
| 93819-94-4 | Zinc bis[O-(6-methylheptyl)]bis[O-(secbutyl)]bis(dithiophosphate) | 0,9 |
| 36878-20-3 | Bis(nonylphenyl)amine | >7,6 |

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

Aquatic organisms: No data available.

Effects in sewage plants No data available.

No data available.

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

The waste codes stated are recommendations based on the expected use of the substance and may be re-assigned to other waste codes by the user, if applicable.

Dispose of waste according to applicable legislation.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Waste disposal number of waste from residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

Waste disposal number of used product

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Dispose of this material and its container to hazardous or special waste collection point. 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:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

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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.

Other applicable information (land transport)

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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

14.2. UN proper shipping name: Motor oil

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.

Other applicable information (inland waterways transport)

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

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

14.2. UN proper shipping name: Motor oil

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.

Other applicable information (marine transport)

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

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

14.2. UN proper shipping name: Motor oil

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.

Other applicable information (air transport)

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. Transport in bulk according to Annex II of Marpol and the IBC Code

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
Additional information

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

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

SECTION 16: Other information
Changes

This data sheet contains changes from the previous version in section(s): 2,3,11.

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

| Classification | Classification procedure |
|---------------------|--------------------------|
| Skin Sens. 1B; H317 | Calculation method |

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

Further Information

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