MOTOREX Oil of Switzerland
Revision: 30.11.2023

Printing date 30.01.2024

Version number 1.1

1 Identification

- · Product identifier
- · Trade name: GEAR OIL HYPOID SAE 80W/90
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Gear Oil

Only for proper handling.

- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

MOTOREX AG

Bern-Zürich-Strasse 31, Postfach

CH-4901 Langenthal

Tel. +41 (0)62 919 75 75

www.motorex.com

A1 Accessory Imports

60-62 Burchill St.

Loganholme

4129 QLD

Australia

Phone: 07 3451 1300

- · Further information obtainable from: msds@motorex.com
- · Emergency telephone number:

In case of a medical emergency following exposure to a chemical, call Poisons Information Centre Australia 13 11 26

2 Hazard(s) Identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

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| | (C | ontd. of page 1) | | |
|--------------------------------------|---|------------------|--|--|
| · Dangerous componer | · Dangerous components: | | | |
| CAS: 68937-96-2 EINECS: 273-103-3 | polysulfides, di-tert-Bu Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≥1-<2.5% | | |
| EC number: 931-384-6 | Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched) Acute Tox. 3, H301; Serious eye damage/irritation – Category 2A, H319; Skin Sens. 1, H317 | ≥0.25-<1% | | |

· Additional information:

Note L: The classification as carcinogen does not apply because the mixture (or substance) contains less than 3% dimethyl sulfoxide extract (DMSO), measured according to IP 346. For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire Fighting Measures

- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Protective equipment: No special measures required.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

The recommended storage temperature is (deg.C): ≤50°C

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- · Storage class: 10
- · Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

- · Additional information about design of technical facilities: No further data; see section 7.
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

| DNELs | | | |
|------------|--|----------------------------------|----------------------------------|
| 68937-96 | -2 polysulfides, di-tert-Bu | | |
| Oral | DNEL/general population/Systemic effect | ts/Long-term | 0.167 mg/kg/24h (consumer) |
| Dermal | DNEL / Workers / Local Effects / Long-term | | 173.75 mg/cm2 (worker) |
| | DNEL / Workers / Systemic effects / Long-term | | 3.33 mg/kg/24h (worker) |
| | DNEL/general population/Systemic effect | ts/Long-term | 1.66 mg/kg/24h (consumer) |
| | DNEL/general population/Local effects/Long-term | | 86.88 mg/cm2 (consumer) |
| Inhalative | DNEL / Workers / Systemic effects / Long-term | | 14.5 mg/m3 (worker) |
| | DNEL/general population/Systemic effect | 2.6 mg/m3 (consumer) | |
| | products of bis(2-methylpentan-2-yl)di e oxide and amines, C12-14 alkyl (bran | | oric acid with phosphorus oxi |
| Oral | DNEL/general population/Systemic effect | ts/Long-term | 0.25 mg/kg/24h (consumer) |
| Dermal | DNEL / Workers / Systemic effects / Long-term | | 12.5 mg/kg/24h (worker) |
| | DNEL/general popul/Local effects/acute- | short term | 0.0235 mg/cm2 (consumer) |
| | DNEL/general population/Systemic effects/Long-term | | 6.25 mg/kg/24h (consumer) |
| Inhalative | DNEL / Workers / Systemic effects / Lon | g-term | 8.56 mg/m3 (worker) |
| | DNEL/general population/Systemic effects/Long-term | | 2.2 mg/m3 (consumer) |
| PNECs | | | |
| 68937-96 | -2 polysulfides, di-tert-Bu | | |
| Oral PNE | C / Predators / Secondary poisoning | 6.66 mg/kg f | ood (aquatic organisms) |
| PNE | C / Aquatic organisms / Freshwater | 0.00024-0.00 | 63 mg/l (aquatic organisms) |
| PNE | C / Aquatic organisms / Marine water | 0.000024-0.0 | 0063 mg/l (aquatic organisms) |
| | FC/Aquatic organisms/Sewage treatment t/STP | 4.51-45 mg/l | (aquatic organisms) |
| | EC / Aquatic organisms / Sediment shwater) | 0.94-94,130 | mg/kg (aquatic organisms) |
| | EC / Aquatic organisms / Sediment rine water) | 0.094-9.413 | mg/kg (aquatic organisms) |
| PNE | C / Terrestrial organism / Soil | 1,513-311,50 | 04 mg/kg (terrestrial organisms) |
| | products of bis(2-methylpentan-2-yl)di e oxide and amines, C12-14 alkyl (bran | | oric acid with phosphorus oxi |
| | C / Predators / Secondary poisoning | | food (secondary poisoni |
| PNE | C / Aquatic organisms / Freshwater | l " | (aquatic organisms) |
| | C / Aquatic organisms / Marine water | _ | l (aquatic organisms) |
| PN | | 0.085 mg/l (aquatic organisms) | |
| PNE | EC/Aquatic organisms/Sewage treatment t/STP | t 24.33 mg/l (aquatic organisms) | |
| | | <u> </u> | (Contd. on page |



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PNEC / Aquatic organisms / Sediment 14.4 mg/kg (aquatic organisms)

(freshwater)

PNEC / Aquatic organisms / Sediment 1.44 mg/kg (aquatic organisms)

(marine water)

PNEC / Terrestrial organism / Soil 2.94 mg/kg (terrestrial organisms)

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

Not necessary if room is well-ventilated.

Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Goggles recommended during refilling
- · Body protection: Protective work clothing

9 Physical and Chemical Properties

· General Information

· Appearance: · Form:

Colour: Yellow-brown
Odour: Characteristic
Odour threshold: Not determined.
pH-value: Not determined.

· Change in condition

Melting point/freezing point:
 Initial boiling point and boiling range:
 Flash point:
 Flammability (solid, gas):
 Decomposition temperature:
 Undetermined.
 >220 °C
 Not applicable.
 Not determined.

• Explosive properties: Product does not present an explosion hazard.

Fluid

Explosion limits:

Lower: Not determined.
Upper: Not determined.
Vapour pressure: Not determined.

Density at 20 °C: 0.891 g/cm³ (ASTM D 4052)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

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· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

• Dynamic: Not determined. • Kinematic: 147 mm²/s @ 40 °C

· Solvent separation test:

· **VOC (EC)** 0.00 %

· Other information No further relevant information available.

10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

| · LD/LC50 | LD/LC50 values relevant for classification: | | | | |
|--------------------|--|-------------------------|--|--|--|
| 68937-96- | 68937-96-2 polysulfides, di-tert-Bu | | | | |
| Oral | LD0 | 2,000 mg/kg (rat) | | | |
| | NOAEL | 50-100 mg/kg/24h (rat) | | | |
| | LOAEL | 200-300 mg/kg/24h (rat) | | | |
| Dermal | LD0 | 2,000 mg/kg (rat) | | | |
| Inhalative | NOAEC | 196 ppm (rat) | | | |
| Reaction propylend | Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide propylene oxide and amines, C12-14 alkyl (branched) | | | | |
| Oral | LD50 | 2,000 mg/kg (rat) | | | |
| | NOEL | 50 mg/kg/24h (rat) | | | |
| | NOAEL | 150 mg/kg/24h (rat) | | | |

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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.
- · 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.

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12 Ecological Information

· Toxicity

| · Aquatic | · Aquatic toxicity: | | | |
|-----------|---|--|--|--|
| 68937-9 | 68937-96-2 polysulfides, di-tert-Bu | | | |
| LC50 | 0.088 mg/l/96h (fish) | | | |
| LC0 | 0.088 mg/l/96h (fish) | | | |
| EC50 | 0.299 g/kg/28d (sediment) | | | |
| EC50 | 0.27 mg/l/24h (aquatic invertebrates) | | | |
| EC10 | 0.092-0.472 mg/l/72h (algae / cyanobacteria) | | | |
| EC50 | 0.299-2.45 mg/l/72h (algae / cyanobacteria) | | | |
| EC50 | 0.24 mg/l/48h (aquatic invertebrates) | | | |
| EL50 | 63 mg/l/48h (aquatic invertebrates) | | | |
| EL50 | 100 mg/l/72h (algae / cyanobacteria) | | | |
| NOEC | 0.094-0.388 g/kg/28d (sediment) | | | |
| NOEC | 0.1 mg/l/72h (algae / cyanobacteria) | | | |
| NOEC | 0.088 mg/l/96h (fish) | | | |
| NOEC | 45.1 mg/l/28d (microorganisms) | | | |
| NOELR | 18 mg/l/48h (aquatic invertebrates) | | | |
| LOELR | 32 mg/l/96h (aquatic invertebrates) | | | |
| LOEC | 0.12-0.32 mg/l/48h (algae / cyanobacteria) | | | |
| LOEC | 0.178 mg/l/21d (sediment) | | | |
| LOEC | 0.088 mg/l/72h (fish) | | | |
| | Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched) | | | |
| EC50 | 2,433 mg/l/3h (microorganisms) | | | |
| EC50 | 6.4-15 mg/l/96h (algae / cyanobacteria) | | | |
| LL50 | 24 mg/l/96h (fish) | | | |
| EL50 | 91.4 mg/l/48h (aquatic invertebrates) | | | |
| EL50 | 0.66 mg/l/21d (aquatic invertebrates) | | | |
| NOEC | 1.7-3.3 mg/l/96h (algae / cyanobacteria) | | | |
| NOELR | 3.2 mg/l/96h (fish) | | | |

- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:

Bioaccumulative potential

68937-96-2 polysulfides, di-tert-Bu

Partition coefficient 5.6 [---] (log Kow) (Bioaccumulation)

Biodegradability 13 % (28d) (Biodegradability) (OECD 301 B)

Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched)

Partition coefficient 0.3-7.1 [---] (log Kow) (Bioaccumulation)

- Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

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· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Return product and/or partially emptied container in original packaging to the point of sale or hand it over to a collection point for special waste.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

| Transport information | |
|---|---|
| · UN-Number · ADG, IMDG, IATA | Not classified as hazardous for transport |
| · UN proper shipping name · ADG, IMDG, IATA | Not classified as hazardous for transport |
| Transport hazard class(es) | |
| · ADG, ADN, IMDG, IATA · Class | Not classified as hazardous for transport |
| Packing group ADG, IMDG, IATA | Not classified as hazardous for transport |
| Environmental hazards: | Not applicable. |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Ann Marpol and the IBC Code | ex II of Not applicable. |
| UN "Model Regulation": | Not classified as hazardous for transport |

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

| Australian | · Australian Inventory of Industrial Chemicals | | | |
|--|--|--|--|--|
| 64742-57-0 | Residual oils (petroleum), hydrotreated | | | |
| 64742-54-7 | Distillates (petroleum), hydrotreated heavy paraffinic | | | |
| | polysulfides, di-tert-Bu | | | |
| 8042-47-5 | White mineral oil (petroleum) | | | |
| 95-38-5 | 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol | | | |
| Standard for | Standard for the Uniform Scheduling of Medicines and Poisons | | | |
| None of the | None of the ingredients is listed. | | | |
| · Australia: Priority Existing Chemicals | | | | |

None of the ingredients is listed.

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- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Chemical safety assessment: A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

- · purity requirement
- · Relevant phrases

H301 Toxic if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

- · Department issuing SDS: Abteilung Produktsicherheit
- Contact:
- Abbreviations and acronyms:

Acute Tox. 3: Acute toxicity - Category 3

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Serious eye damage/irritation - Category 2A: Serious eye damage/eye irritation - Category 2A

Skin Sens. 1: Skin sensitisation - Category 1

· * Data compared to the previous version altered.

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