

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 26.05.2017

Version number 2

Revision: 26.05.2017






SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: MOTÖL SYN-500 SAE 20W50**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Multigrade Motor Oil for Motorcycles
SAE 20W-50
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Nano Oil Refining Company NORC GmbH
Brandstücken 24
22549 Hamburg
Tel: +49 (0)40 571 99 830
Email: info@norc-germany.de

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Contact with skin and inhalation of aerosols/ vapours of the preparation should be avoided.
The product is water polluting material and must not reach the ground, into drains into surface water or groundwater.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Preparation of base oils and additives.
- **Dangerous components:**
- CAS: 68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts ≤ 2.5%
- EINECS: 272-028-3  Xi R38-41;  N R51/53
-  Eye Dam. 1, H318;  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315
- Calciumalkyl-Phenat-Sulfid, langkettig ≤ 2.5%
- R53
- Aquatic Chronic 4, H413
- **SVHC** Void
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Take affected persons out of danger area and lay down.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
carbondioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Avoid the formation of oil haze.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Note Regulation on facilities for the storage, filling and handling water-polluting substances. ..
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Storage in a collecting room is required.
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

Oilfog and Oilfumes	TLV-8h-TWA	5mg/m ³
	TLV-15min-STEEL	10mg/m ³
- **Additional information:**

The lists valid during the making were used as basis.
Used engine oil may contain considered dangerous combustion products which can cause skin cancer. Any skin contact should be avoided by applying personal hygiene measures. (See Chapter 8)
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**

Preventive skin protection by use of skin-protecting agents is recommended.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:** Leather gloves
- **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**

· Appearance:	clear
· Form:	Fluid
· Colour:	Brown
· Odour:	Mineral-oil-like
· Odour threshold:	Not determined.

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- **pH-value:** *Not determined.*
- **Change in condition**
 - Melting point/Melting range:** *Undetermined.*
 - Boiling point/Boiling range:** *Undetermined.*
- **Pour point** *- 27 °C (DIN ISO 3016)*
- **Flash point:** *228 °C (DIN ISO 2592)*
- **Flammability (solid, gaseous):** *Not applicable.*
- **Ignition temperature:**
 - Decomposition temperature:** *Not determined.*
- **Self-igniting:** *Not determined.*
- **Danger of explosion:** *Product is not explosive. However, formation of explosive air/vapour mixtures are possible.*
- **Explosion limits:**
 - Lower:** *0.6 Vol % (DIN EN 1839)*
 - Upper:** *6.5 Vol % (DIN EN 1839)*
- **Vapour pressure:** *Not determined.*
- **Density at 20 °C:** *0.888 g/cm³ (DIN 51757)*
- **Relative density** *Not determined.*
- **Vapour density** *Not determined.*
- **Evaporation rate** *Not determined.*
- **Solubility in / Miscibility with water:** *Not miscible or difficult to mix.*
- **Partition coefficient (n-octanol/water):** *Not determined.*
- **Viscosity:**
 - Dynamic:** *Not determined.*
 - Kinematic:** *Not determined.*
- **Solvent content:**
 - Organic solvents:** *0.0 %*
- **9.2 Other information** *No further relevant information available.*

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions** *Reacts with strong oxidising agents.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** *No further relevant information available.*
- **10.6 Hazardous decomposition products:** *Carbon monoxide and carbon dioxide*

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
- **LD/LC50 values relevant for classification:**
 - Rat oral : > 2000 mg/kg (Concawe Product dossier 01/54)*
 - 68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts**
 - Oral LD50 > 2000 mg/kg (rat)*

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- **Primary irritant effect:**
- **Skin corrosion/irritation** Prolonged skin contact it may cause irritations
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
Used engine oil may contain considered dangerous combustion products which can cause skin cancer. Any skin contact should be avoided by applying personal hygiene measures. (See Chapter 8)
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
The product spreads out on the surface of the water. A small fraction of the constituents will be dissolved. It prevents the solution of oxygen and can cause the death of water organisms.
68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts
EC50 1 - 1.5 mg/kg (daphnia) (OECD Guide-line 202 part I, Daphnia A.I.T.)
- **12.2 Persistence and degradability** Not easily biodegradable
- **12.3 Bioaccumulative potential**
Due to the distribution coefficient n-octanol/water a worth-mentioning accumulation in organisms is not expected.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** The product can easily be separated by an oil separator (skimmer) of the water surface.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Delivery of waste oil to officially authorised collectors only.
- **European waste catalogue**
13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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SECTION 14: Transport information

- **14.1 UN-Number**
· **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
· **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
· **ADR, ADN, IMDG, IATA**
· **Class** Void
- **14.4 Packing group**
· **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:**
· **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials, Annex II:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Information about limitation of use:** none
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Relevant phrases**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

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R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53 May cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS: Product safety**

· **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 Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

· **Sources** *Concawe Product Dossier No.97/108. Concawe Product Dossier Nn. 01/54.*

· *** Data compared to the previous version altered.**