MOTOREX Oil of Switzerland
Revision: 13.03.2023

Printing date 02.02.2024

Version number 3.1

1 Identification

- · Product identifier
- Trade name: SCOOTER GEAR OIL ZX 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

- · 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
- 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.

Dangerous componen	ts:	
	polysulfides, di-tert-Bu	≥1-<2.5%
EINECS: 273-103-3	Skin Sens. 1B, H317	
	Mineral oils (mixture)	≥0.25-≤2.5%
	Asp. Tox. 1, H304	
	Reaction products of bis(2-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched) Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1B, H317	

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.

- AL

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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:

Do not induce vomitting. Do not take in resorption stimulating agents.

Consult a physician who will decide on need and method of emptying the stomach.

- 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

In case of fire carbon, sulphur and nitrogen oxides can be formed.

· 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

Used oils (motor oils, gear oils, industrial oils) contain components causing skin cancer. Therefore, avoid skin contact by wearing protecting gloves. Carefully clean soiled parts of the skin with soap. No special measures required.

- Information about fire and explosion protection: Do not heat above flash point.
- 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

- · 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.

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· 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 effec	ts/Long-term	0.167 mg/kg/24h (consumer)
Dermal	DNEL / Workers / Local Effects / Long-te	DNEL / Workers / Local Effects / Long-term	
	DNEL / Workers / Systemic effects / Long	g-term	3.33 mg/kg/24h (worker)
	DNEL/general population/Systemic effec	ts/Long-term	1.66 mg/kg/24h (consumer)
	DNEL/general population/Local effects/Li	ong-term	86.88 mg/cm2 (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long	g-term	14.5 mg/m3 (worker)
	DNEL/general population/Systemic effect	ts/Long-term	2.6 mg/m3 (consumer)
Reaction	products of bis(2-methylpentan-2-yl)di e oxide and amines, C12-14 alkyl (brand	ithiophospho	oric acid with phosphorus oxid
Oral	· · · · · · · · · · · · · · · · · · ·	-	0.25 mg/kg/24h (consumer)
	DNEL/general population/Systemic effect	•	
Dermal	DNEL / Workers / Systemic effects / Long	_	12.5 mg/kg/24h (worker)
	DNEL/general popul/Local effects/acute-		0.0235 mg/cm2 (consumer)
	DNEL/general population/Systemic effec	Ū	6.25 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long	_	8.56 mg/m3 (worker)
	DNEL/general population/Systemic effec	ts/Long-term	2.2 mg/m3 (consumer)
PNECs			
	-2 polysulfides, di-tert-Bu		
ı	EC / Predators / Secondary poisoning	-	iood (aquatic organisms)
ı	EC / Aquatic organisms / Freshwater		63 mg/l (aquatic organisms)
PNE	EC / Aquatic organisms / Marine water	0.000024-0.0	0063 mg/l (aquatic organisms)
	EC/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	1,513-311,504 mg/kg (terrestrial organisms)	
Reaction	products of bis(2-methylpentan-2-yl)di	thiophospho	oric acid with phosphorus oxid
	e oxide and amines, C12-14 alkyl (brand EC / Predators / Secondary poisoning		food (secondary poisonin
Crai i ivi	.071 redators / Secondary poisoning	(predators))	Tood (Secondary poisoning
PNE	C / Aquatic organisms / Freshwater	0.0012 mg/l	(aquatic organisms)
PNE	EC / Aquatic organisms / Marine water	0.00012 mg/	'l (aquatic organisms)
	EC/Aquatic org/intermittent ases(freshwater)	0.085 mg/l (a	aquatic organisms)
	EC/Aquatic organisms/Sewage treatment t/STP	24.33 mg/l (a	aquatic organisms)
1	EC / Aquatic organisms / Sediment	14.4 mg/kg (aquatic organisms)
	shwater)		
(fres	Shwater) EC / Aquatic organisms / Sediment rine water)	1.44 mg/kg (aquatic organisms)

· Additional information: The lists valid during the making were used as basis.

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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: Fluid
Colour: 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):
Auto-ignition temperature:
Decomposition temperature:

Undetermined.

>210 °C
Not applicable.
>260 °C (DIN 51794)
Not determined.

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

· Explosion limits:

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

• **Density at 20 °C:** 0.895 g/cm³ (ASTM D 4052)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 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:** 140 mm²/s @40 °C (DIN 51562-1)

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Solvent separation test:
 VOC (EC)
 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 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.

12 Ecological Information

Toxicity

Aquatio	· Aquatic toxicity:		
68937-9	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)		

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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)
	n products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, ne 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:

Water hazard class 1 (according to Appendix 1 AwSV): slightly hazardous for water

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.
- · 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.

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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.

UN-Number	
ADG, ADN, IMDG, IATA	Not classified as hazardous for transport
UN proper shipping name ADG, ADN, 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:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Anno	ex II of
Marpol and the IBC Code	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

S5

- · 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.

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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

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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

Acute Tox. 4: Acute toxicity - Category 4

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1B: Skin sensitisation - Category 1B

Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.

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