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

1.1 Product identifier

power steering oil
Article number: 10 90 8972

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant uses

Gearbox oil

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

SWAG Autoteile GmbH
Am Kiesberg 4-6
42117 Wuppertal / GERMANY
Phone +49 (0)202 26454-0
Fax +49 (0)202 26454-5000
Homepage www.swag.de
E-mail info@swag.de

Address enquiries to

Technical information	info@swag.de
Safety Data Sheet	info@swag.de

1.4 Emergency telephone number

Advisory body	+49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

No classification.

2.2 Label elements

The product does not require a hazard warning label in accordance with regulation CLP.

Hazard pictograms	none
Signal word	none
Hazard statements	none
Precautionary statements	none

2.3 Other hazards

Human health dangers	If swallowed or in the event of vomiting, risk of product entering the lungs. Frequent persistent contact with the skin can cause skin irritation.
Environmental hazards	Contains no ingredients with endocrine-disrupting properties. Does not contain any PBT or vPvB substances.
Other hazards	No particular hazards known.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
0,1 - <1	N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
	EINECS/ELINCS: 930-859-5, Reg-No.: 01-2120763467-44-XXXX
	GHS/CLP: Skin Corr. 1C: H314 - Eye Dam. 1: H318 - Aquatic Acute 1: H400 - Aquatic Chronic 2: H411, M-Factor (acute): 1
0,1 - <1	Alkyl thiophosphites
	EINECS/ELINCS: 424-820-7, Reg-No.: 01-0000017126-75-XXXX
	GHS/CLP: Skin Corr. 1B: H314 - Acute Tox. 4: H312 - Aquatic Chronic 1: H410 - Aquatic Acute 1: H400, M-Factor (acute): 10, M-Factor (chronic): 10

Comment on component parts For full text of H-statements: see SECTION 16.
contains less than 3% w/w DMSO-extract

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Seek medical advice immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in the event of vomiting, risk of product entering the lungs.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Fire extinguishing method of surrounding areas must be considered.
Carbon dioxide.
Dry powder.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Not combusted hydrocarbons.
Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Some risk of slipping due to spillage of product.
Forms slippery surfaces with water.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of aerosols.

The product is combustible.

Do not eat, drink or smoke when using this product.
Use barrier skin cream.
Wash hands before breaks and after work.
Cloths contaminated with product should not be kept in trouser pockets.
Take off contaminated clothing and wash before reuse.
Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.
Do not store together with oxidizing agents.

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (UK)

not relevant

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

DNEL

Substance
Alkyl thiophosphites
Industrial, inhalative, Long-term - systemic effects, 1,76 mg/m³
Industrial, dermal, Long-term - systemic effects, 0,5 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0,43 mg/m³
general population, dermal, Long-term - systemic effects, 0,25 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,25 mg/kg bw/day
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
Industrial, inhalative, Long-term - systemic effects, 2,93 mg/m³
Industrial, dermal, Long-term - systemic effects, 830 µg/kg bw/day
general population, dermal, Long-term - systemic effects, 420 µg/kg bw/day
general population, oral, Long-term - systemic effects, 420 µg/kg bw/day
general population, inhalative, Long-term - systemic effects, 720 µg/m³

PNEC

Substance
Alkyl thiophosphites
freshwater, 900 ng/l
seawater, 90 ng/l
sewage treatment plants (STP), 54 mg/l
sediment (freshwater), 0,073 mg/kg
sediment (seawater), 0,007 mg/kg
soil, 0,015 mg/kg
oral (food), 10 mg/kg
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
freshwater, 790 ng/L
seawater, 79 ng/L
sewage treatment plants (STP), 100 mg/L
sediment (freshwater), 4,5 µg/kg sediment dw
sediment (seawater), 450 ng/kg sediment dw
soil, 2 µg/kg soil dw
oral (food), 16,67 mg/kg food

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. General exposure limit for oil mist should be noted.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,4 mm Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	light protective clothing
Other	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	light yellow
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point or initial boiling point and boiling range [°C]	not applicable
Flash point [°C]	220
Flammability	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	0,85 (15 °C / 59,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

No dangerous reactions known if used as directed.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agent.
Strong bases
Strong acids.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Product
ATE-mix, oral, >2000 mg/kg bw

Substance
Alkyl thiophosphites
LD50, oral, Rat, > 2000 mg/kg
NOAEL, oral, Rat, 50 - 150 mg/kg bw/day
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
LD50, oral, Rat, >2000 mg/kg bw, OECD 401

Acute dermal toxicity

Product
ATE-mix, dermal, >2000 mg/kg bw

Substance
Alkyl thiophosphites
LD50, dermal, Rabbit, > 500 mg/kg
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
LD50, dermal, Rabbit, >2000 mg/kg bw, OECD 402

Acute inhalational toxicity

Product
ATE-mix, inhalation (vapour), >20 mg/L

Serious eye damage/irritation Based on the available information, the classification criteria are not fulfilled.

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
dermal, Rabbit, Study, Causes serious eye damage.

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
NOAEL, oral, Rat, 250 mg/kg bw/day, OECD 407, adverse effect observed

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
in vitro, OECD 471, negativ

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

- Fertility

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
NOAEL, oral, Rat, 100 mg/kg bw/day, OECD 421, adverse effect observed

- Development

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
oral, Rat, 100 mg/kg bw/day, OECD 421, adverse effect observed

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Does not contain a relevant substance that meets the classification criteria.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

Product

Based on the available information, the classification criteria are not fulfilled.

Substance
Alkyl thiophosphites
EL50, (48h), Daphnia magna, 0,09 mg/l
EL50, (72h), Selenastrum capricornutum, 0,31 mg/l
LL50, (21d), Daphnia magna, 0,22 mg/l
LL50, (24h), Oncorhynchus mykiss, 2 mg/l
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
LC50, (96h), Fish, 690 mg/L, OECD 203
EC50, (72h), Pseudokirchneriella subcapitata, 790 µg/L, OECD 201
EL50, (48h), Daphnia magna, 4 mg/L, OECD 202

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability No information available.

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
(28d), Activated sewage sludge, OECD 301 B, The product is not readily biodegradable.

12.3 Bioaccumulative potential

No information available.

Substance
N,N-bis(2-hydroxyethyl)-3-[(C16-18)alkoxy]-1-propanamine
BCF, 53 L/kg

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Does not contain a relevant substance that meets the classification criteria.

12.7 Other adverse effects

No classification due to toxicological investigations.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

In according to RoHS!
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 130205* mineral-based non-chlorinated engine, gear and lubricating oils

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150102
150104
150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EG (2000/532/EC); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 75
	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is not subject to any restrictions.
TRANSPORT-REGULATIONS	ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)
NATIONAL REGULATIONS (UK):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	no
- VOC (2010/75/CE)	No information available.

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H410 Very toxic to aquatic life with long lasting effects.
H312 Harmful in contact with skin.

H411 Toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Modified position 2.2, 2.3, 3.2, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2, 9.1, 10.3, 10.4, 10.5, 11.1, 11.2, 12.1, 12.2, 12.3, 12.6, 12.7, 13.1, 15.1, 15.2, 16.1, 16.3