

Page 1 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

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

Gear lubricant Sector of use [SU]:

അ

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU21 - Consumer uses: Private households (=general public = consumers) SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Chemical product category [PC]: PC17 - Hydraulic fluids PC24 - Lubricants, greases, release products Process category [PROC]: PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC20 - Use of functional fluids in small devices Article Categories [AC]: AC99 - Not required. Environmental Release Category [ERC]: ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC 7 - Use of functional fluid at industrial site ERC 9a - Widespread use of functional fluid (indoor) ERC 9b - Widespread use of functional fluid (outdoor) Uses advised against: No information available at present. 1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420-0 Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)



Page 2 of 9

അ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH208-Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched). May produce an allergic reaction. EUH210-Safety data sheet available on request.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %). The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC)

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0, 1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	
CAS	
content %	
Classification according to Regulation (EC) 1272/2008 (CLP)	

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.



Page 3 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. with long-term contact:

Drying of the skin.

ആ

Dermatitis (skin inflammation) 4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2 Dry extinguisher Foam

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air. Avoid contact with eyes or skin. If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

Fill the absorbed material into lockable containers.

Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation. Avoid formation of oil mist. Avoid contact with eyes. Avoid long lasting or intensive contact with skin. Do not carry cleaning cloths soaked in product in trouser pockets.



Page 4 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.

Store product closed and only in original packing. Under all circumstances prevent penetration into the soil. Protect from direct sunlight and warming. Store in a well ventilated place. Store in a dry place.

7.3 Specific end use(s)

ആ

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Oil mist, mineral				Content %:
WEL-TWA: 5 mg/m3 (Mineral oil, e	excluding metal	WEL-STEL:			
working fluids, ACGIH)					
Monitoring procedures:	-	Draeger - Oil 10/a-P (67 28 371)			
	-	Draeger - Oil Mist 1/a (67 33 031)			
BMGV:			Other information:	-	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. BS EN 14042.

BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection:



Page 5 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

Chemical resistant protective gloves (EN 374). If applicable

Protective nitrile gloves (EN 374).

Protective Neoprene® / polychloroprene gloves (EN 374). Minimum layer thickness in mm:

0,5

ആ

Permeation time (penetration time) in minutes:

480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary. With oil mist formation: Filter A P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Blue
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	224 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,9 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	163,5 mm2/s (40°C)
Viscosity:	15,5 mm2/s (100°C)
-	· · · ·



Page 6 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

Explosive properties: Oxidising properties:

œ

9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: Product is not explosive. No

Not determined Not determined Not determined Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Open flame, ignition sources

10.5 Incompatible materials Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

Marine High Performance Getriebeoel 85W-90 1 L

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

SECTION 12: Ecological information

 Possibly more information on environmental effects, see Section 2.1 (classification).

 Marine High Performance Getriebeoel 85W-90 1 L

 Art.: 25078

 Toxicity / effect
 Endpoint

 Time
 Value
 Unit

 Organism

Art.: 25078 Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	Lindpoint		Value	Unit	organishi	rest method	n.d.a.
							n.u.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.



Page 7 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

12.2. Persistence and		n.d.a.
degradability:		
12.3. Bioaccumulative		n.d.a.
potential:		
12.4. Mobility in soil:		n.d.a.
12.5. Results of PBT		n.d.a.
and vPvB assessment		
12.6. Other adverse		n.d.a.
effects:		

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

13 02 06 synthetic engine, gear and lubricating oils

Recommendation:

ദ്ര

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements 14.1. UN number:	n.a.
Transport by road/by rail (ADR/RID)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	
Transport by sea (IMDG-code)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Marine Pollutant:	n.a
14.5. Environmental hazards:	Not applicable
Transport by air (IATA)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
14.5. Environmental hazards:	Not applicable
14.6. Special precautions for user	
Unless specified otherwise, general measures for safe transport must b	e followed.
14.7. Transport in bulk according to Annex II of M	IARPOL and the IBC Code

Non-dangerous material according to Transport Regulations.



Page 8 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078

SECTION 15: Regulatory information

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

Observe restrictions: General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC):

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

< 0.1 %

Revised sections:

ദ്ര

15

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP): Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

Any abbreviations and acronyms used in this document:

according, according to acc., acc. to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BAuA The International Bromine Council BSEF body weight bw CAS **Chemical Abstracts Service** Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances CLP and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level dw dry weight e.g. for example (abbreviation of Latin 'exempli gratia'), for instance European Community FC ECHA European Chemicals Agency FFC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances EN European Norms United States Environmental Protection Agency (United States of America) EPA et cetera etc. EU **European Union** EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number gen. general GHS Globally Harmonized System of Classification and Labelling of Chemicals



ദ്ര Page 9 of 9 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 13.08.2019 / 0002 Replacing version dated / version: 27.10.2017 / 0001 Valid from: 13.08.2019 PDF print date: 22.11.2019 Marine High Performance Getriebeoel 85W-90 1 L Art.: 25078 Global warming potential GWP IARC International Agency for Research on Cancer International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) International Maritime Code for Dangerous Goods IMDG-code incl. including, inclusive IUCLID International Uniform Chemical Information Database Limited Quantities 10 MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. n.av. not available not checked n.c. no data available n.d.a. OECD Organisation for Economic Co-operation and Development organic org. PBT persistent, bioaccumulative and toxic ΡE Polyethylene PNEC Predicted No Effect Concentration parts per million ppm **PVC** Polyvinylchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List REACH-IT List-No. Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail) SVHC Substances of Very High Concern Tel. Telephone UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative wwt wet weight The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.