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Page 1 of 13

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

Revised on / Version: 11.04.2013 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

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

Zentralhydraulik-Öl 2300 1 L

Art.: 3665

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

Hydraulic oil

Sector of use [SU]:

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 - Use in closed process, no likelihood of exposure.

PROC 2 - Use in closed, continuous process with occasional controlled exposure

PROC 8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC20 - Heat and pressure transfer fluids in dispersive, professional use but closed systems

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Industrial use of processing aids in processes and products, not becoming part of articles

ERC 7 - Industrial use of substances in closed systems

ERC 9a - Wide dispersive indoor use of substances in closed systems

ERC 9b - Wide dispersive outdoor use of substances in closed systems

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr

Telephone (+49) 0731-1420-0, Fax (+49) 0731-1420-88

 $\hbox{E-mail address of the competent person: info@chemical-check.de, $k.$schnurbusch@chemical-check.de}$

1.4 Emergency telephone

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

Tel.: (+49) 0731-1420-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined



Page 2 of 13

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

Revised on / Version: 11.04.2013 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

Dangerous for the environment, R52-53

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments)

Symbols: Not applicable Indications of danger:

R-phrases:

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases:

56 Dispose of this material and its container to hazardous or special waste collection point.

Additions:

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.

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

In case of skin injury by high pressure, a risk of penetration of lubricant into the skin exists.

Product can compose a film on the water surface, which can prevent oxygen exchange.

Endangerment of potable water possible.

SECTION 3: Composition/information on ingredients

Mineral oil raffinate

Additives

3.1 Substance

n.a. 3.2 Mixture

0.2	
Distillates (petroleum), solvent-dewaxed light paraffinic	
Registration number (REACH)	01-2119480132-48-XXXX
Index	649-469-00-9
EINECS, ELINCS, NLP	265-159-2
CAS	CAS 64742-56-9
content %	50-<75
Classification according to Directive 67/548/EEC	
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Distillates (petroleum), hydrotreated light naphthenic	
Registration number (REACH)	01-2119480375-34-XXXX
Index	649-466-00-2
EINECS, ELINCS, NLP	265-156-6
CAS	CAS 64742-53-6
content %	20-<25
Classification according to Directive 67/548/EEC	
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Distillates (petroleum), hydrotreated middle		
Registration number (REACH)		
Index	649-221-00-X	
EINECS, ELINCS, NLP	265-148-2	
CAS	CAS 64742-46-7	
content %	1-<10	
Classification according to Directive 67/548/EEC	Harmful, Xn, R65	
_	R66	



Page 3 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304
Baseoil - unspecified	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	-
CAS	CAS
content %	1-<5
Classification according to Directive 67/548/EEC	
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-	
Pr) esters, zinc salts	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	288-917-4
CAS	CAS 85940-28-9
content %	1-<2,5
Classification according to Directive 67/548/EEC	Irritant, Xi, R38
	Irritant, Xi, R41
	Dangerous for the environment, N, R51
	Dangerous for the environment, R53
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315
	Eye Dam. 1, H318
	Aquatic Chronic 2, H411

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	203-749-3
CAS	CAS 110-25-8
content %	0,1-<0,25
Classification according to Directive 67/548/EEC	Irritant, Xi, R38
	Irritant, Xi, R41
	Dangerous for the environment, N, R50
	Dangerous for the environment, R53
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315
	Eye Dam. 1, H318
	Aquatic Acute 1, H400 (M=1)
	Aquatic Chronic 1, H410 (M=1)

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

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.

Unsuitable cleaning product:

Solvent

Thinners

In case of skin injury by high pressure, a risk of penetration of lubricant into the skin exists.

Immediate admittance to a hospital.

Eye contact

Remove contact lenses.

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



Œ

Page 4 of 13

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

Revised on / Version: 11.04.2013 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. 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.

Eye contact:

Temporary irritation

With long-term contact:

Drying of the skin.

Dermatitis (skin inflammation)

Oil acne

On vapour formation:

Irritation of the respiratory tract

Inaestion:

Gastrointestinal disturbances

Nausea

Vomiting

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO2

Foam

Extinction powder

Cool container at risk with water.

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

Oxides of phosphorus

Oxides of sulphur

Metal oxides

Toxic pyrolysis products.

Flammable vapour/air mixtures

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

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid formation of oil mist.

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.



Page 5 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

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, sawdust) and dispose of according to Section 13. Oil binder

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

Avoid formation of oil mist.

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke.

Do not heat to temperatures close to flash point.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

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

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Impermeable floor.

Protect against moisture and store closed.

Protect from direct sunlight and warming.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Distillates (petroleu	Content %:20- <25				
WEL-TWA: 5 mg/m3 (oil mist, min	eral, ACGIH)	eral, ACGIH) WEL-STEL: 10 mg/m3 (oil mist, mineral, ACGIH)				
BMGV: Other information:						
Chemical Name	Oil mist, mineral				Content %:	
WEL-TWA: 5 mg/m3 (ACGIH)		WEL-STEL:	10 mg/m3 (ACGIH)			
DMC\/:			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). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | 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.



Œ

Page 6 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,7	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	5,4	mg/m3	

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.

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 with side protection (EN 166).

Skin protection - Hand protection:

Protective gloves, oil resistant (EN 374)

Recommended

Protective Neopren gloves (EN 374).

Protective nitrile gloves (EN 374)

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 A2 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: Amber
Odour: Mineral oil



Page 7 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Odour threshold: Not determined

pH-value: n.a.

Melting point/freezing point:

Initial boiling point and boiling range:

Flash point:

Evaporation rate:

Not determined

Vapour pressure:

Vapour density (air = 1):

Density:

Not determined

Not determined

Not determined

Not determined

0,865 g/cm3 (15°C)

Bulk density: n.a.

Solubility(ies):
Water solubility:
Not determined
Insoluble

Partition coefficient (n-octanol/water): >3
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined

Viscosity: 16 mm2/s (40°C)
Explosive properties: Product is not explosive.

Oxidising properties: No

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Not determined

Not determined

Surface tension:

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

See also section 7.

Heating, open flame, ignition sources

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Zentralhydraulik-Öl 2300 1 L						
Art.: 3665						
Toxicity/effect	Endpoin	Value	Unit	Organism	Test method	Notes
	t					
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.



Page 8 of 13

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Carcinogenicity:		n.d.a.
Reproductive toxicity:		n.d.a.
Specific target organ toxicity -		n.d.a.
single exposure (STOT-SE):		
Specific target organ toxicity -		n.d.a.
repeated exposure (STOT-RE):		
Aspiration hazard:		n.d.a.
Respiratory tract irritation:		n.d.a.
Repeated dose toxicity:		n.d.a.
Symptoms:		n.d.a.
Other information:		Classification according
		to calculation procedure.

Toxicity/effect	Endpoin	Value	Unit	Organism	Test method	Notes
	t					
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	
					Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat	OECD 403 (Acute	
					Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal `	
					Irritation/Corrosion)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
, ,					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	Not sensitizising
sensitisation:				' '	Sensitisation)	
Germ cell mutagenicity:					(Ames-Test)	Negative
Germ cell mutagenicity (in vitro):					OECD 471 (Bacterial	Negative
3 , (,					Reverse Mutation Test)	
Carcinogenicity:					,	Negative
Reproductive toxicity:					OECD 421	Negative
					(Reproduction/Develop	
					mental Toxicity	
					Screening Test)	
Aspiration hazard:					-	Yes, Classification
						according to Regulation
						(EC) 1272/2008 (CLP)
Repeated dose toxicity:	NOAEL	100	mg/m3			No indications of such an
						effect.
Symptoms:						eyes, reddened,
						headaches, vomiting,
						nausea, drying of the skin
Other information:	NOAEL	>2000	mg/kg	Rat	OECD 411	
					(Subchronic Dermal	
					Toxicity - 90-day Study)	

Distillates (petroleum), hydrotreated middle							
Toxicity/effect	Endpoin t	Value	Unit	Organism	Test method	Notes	
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.	
Aspiration hazard:						Yes	
Symptoms:						vomiting, skin afflictions	

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine									
Toxicity/effect	Toxicity/effect Endpoin Value Unit Organism Test method Notes								
	t								



Page 9 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Symptoms:			respiratory distress,
			diarrhoea, cornea
			opacity, mucous
			membrane irritation

SECTION 12: Ecological information

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

Zentralhydraulik-Öl 230 Art.: 3665	0 1 L						
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	•						n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and							Isolate as much as
degradability:							possible with an oil separator.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and							n.d.a.
vPvB assessment:							
Other adverse effects:							n.d.a.

Distillates (petroleum), hydrotreated light naphthenic							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna		
Toxicity to algae:	NOEC/NO EL	72h	>100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	10	%			Not readily biodegradable
Bioaccumulative potential:	Log Pow		6,0				A notable biological accumulation potential has to be expected (LogPow > 3).
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Water solubility:							Insoluble

Distillates (petroleum), hydrotreated middle									
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
Persistence and							Readily biodegradable		
degradability:									

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. (2001/118/EC, 2001/119/EC, 2001/573/EC) 13 01 10 mineral based non-chlorinated hydraulic oils Recommendation:

Pay attention to local and national official regulations



Page 10 of 13

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

Revised on / Version: 11.04.2013 / 0003

Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013

PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

Implement substance recycling. E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations

15 01 02 plastic packaging 15 01 04 metallic packaging

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

UN number: n.a.

Transport by road/by rail (ADR/RID)

UN proper shipping name:

Transport hazard class(es):

Packing group:

Classification code:

LQ (ADR 2013):

LQ (ADR 2009):

n.a.

n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

UN proper shipping name:

Transport hazard class(es):

Packing group:

Marine Pollutant:

n.a.

Environmental hazards: Not applicable

Transport by air (IATA)

UN proper shipping name:

Transport hazard class(es):

Packing group:

n.a.

n.a.

Environmental hazards: Not applicable

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

n.a.

Comply with trade association/occupational health regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections:

2, 3, 8, 11, 12, 16

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

38 Irritating to skin.

41 Risk of serious damage to eyes.

50 Very toxic to aquatic organisms.

51 Toxic to aquatic organisms.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



Page 11 of 13

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

Revised on / Version: 11.04.2013 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

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

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Asp. Tox. — Aspiration hazard

Skin Irrit. — Skin irritation

Eye Dam. — Serious eye damage

Aquatic Chronic — Hazardous to the aquatic environment - chronic Aquatic Acute — Hazardous to the aquatic environment - acute

Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the

International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level
AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances

and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera



Page 12 of 13

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

Revised on / Version: 11.04.2013 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 11.04.2013 PDF print date: 11.04.2013

Zentralhydraulik-Öl 2300 1 L Art.: 3665

ΕU **European Union**

EWC European Waste Catalogue

Fax. Fax number general aen.

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential IARC International Agency for Research on Cancer IATA International Air Transport Association Intermediate Bulk Container **IBC**

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

including, inclusive incl.

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration

Lethal Dose of a chemical LD LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level LOFC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level

Limited Quantities IΩ

MARPOL International Convention for the Prevention of Marine Pollution from Ships

not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAECNo Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon persistent, bioaccumulative and toxic PBT

PC Chemical product category

Polyethylene PΕ

PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential

ppm parts per million PROC Process category PTFE Polytetrafluorethylene

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 Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

Structure Activity Relationship SAR

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

Theoretical oxygen demand ThOD

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) \/hF

VOC Volatile organic compounds



Page 13 of 13

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vPvB very persistent and very bioaccumulative

WÉL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) WEL-TWA, WEL-STEL reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

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.

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