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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

Molygen New Generation 5W-20

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

Hydraulic oil

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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 - 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) Life cycle stages (LCS): LCS F - Formulation or re-packing LCS IS - Use at industrial sites LCS PW - Widespread use by professional workers LCS C - Consumer use Technical functions (TF): Lubricating agent 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:



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Telephone number of the company in case of emergencies:

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

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)

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) 1907/2006 (< 0,1 %).

Product can compose a film on the water surface, which can prevent oxygen exchange. Hazardous to drinking water, on escape of even small quantities.

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	
Registration number (REACH)	01-2119474889-13-XXXX
Index	649-483-00-5
EINECS, ELINCS, NLP, REACH-IT List-No.	276-738-4
CAS	72623-87-1
content %	50-60
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304
Highly refined mineral oil (C15 - C50) *	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	
CAS	
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304
Bis(nonylphenyl)amine	
Registration number (REACH)	01-2119488911-28-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	253-249-4
CAS	36878-20-3
content %	<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 4, H413

* The contained mineral oil can be described by one or more of the following numbers:



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EINECS, ELINCS, NLP, REACH-	Registration number (REACH)	Chemical name
IT List-No.		
265-090-8		Baseoil - unspecified
265-091-3		Distillates (petroleum), solvent-refined light paraffinic
265-097-6		Distillates (petroleum), solvent-refined heavy naphthenic
265-098-1		Distillates (petroleum), solvent-refined light naphthenic
265-101-6		Baseoil - unspecified
265-156-6		Distillates (petroleum), hydrotreated light naphthenic
265-157-1		Distillates (petroleum), hydrotreated heavy paraffinic
265-158-7		Distillates (petroleum), hydrotreated light paraffinic
265-159-2		Distillates (petroleum), solvent-dewaxed light paraffinic
265-169-7		Distillates (petroleum), solvent-dewaxed heavy paraffinic
276-737-9		Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
276-738-4		Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
278-012-2		Baseoil - unspecified
265-155-0		Baseoil - unspecified
276-735-8		Lubricating oils (petroleum), C>25, hydrotreated bright stock-based
276-736-3		Baseoil - unspecified
265-096-0		Residual oils (petroleum), solvent deasphalted
265-160-8		Residual oils (petroleum), hydrotreated
265-161-3		Lubricating oils (petroleum), hydrotreated spent
265-166-0		Residual oils (petroleum), solvent-dewaxed
265-176-5		Paraffin oils (petroleum), catalytic dewaxed light

The substances named in this section are given with their actual, appropriate classification! For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

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

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

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. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. The following may occur: Irritation of the eyes With long-term contact: Drying of the skin. Dermatitis (skin inflammation) Oil acne On vapour formation: Irritation of the respiratory tract Ingestion: Gastrointestinal disturbances



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Nausea Vomiting

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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 Foam Dry extinguisher

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 nitrogen Oxides of sulphur Oxides of phosphorus 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 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. 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.



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Avoid contact with eyes.

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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. 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.

Store at room temperature. 7.3 Specific end use(s)

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,	excluding metal	WEL-STEL:		
working fluids, ACGIH)				
Monitoring procedures:	-	Draeger - Oil Mist 1/a (67 33 031)		
BMGV:			Other information:	

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based									
Area of application	Exposure route /	xposure route / Effect on health Descriptor Value Unit							
	Environmental								
	compartment								
	Human - oral		PNEC	9,33	mg/kg feed				
Consumer	Human - inhalation	Long term, local effects	DNEL	1,2	mg/m3	24h			
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,4	mg/m3	8h			

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,1	mg/l	
	Environment - marine		PNEC	0,01	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1	mg/l	
	Environment - sewage treatment plant		PNEC	1	mg/l	
	Environment - sediment, freshwater		PNEC	132000	mg/kg dw	
	Environment - sediment, marine		PNEC	13200	mg/kg dw	
	Environment - soil		DNEL	263000	mg/kg dw	
	Environment - periodic release		PNEC	1	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,31	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,09	mg/m3	



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Consumer	Human - dermal	Long term, systemic effects	DNEL	0,31	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,62	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	4,37	mg/m3	

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 (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | 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. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

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. EN 14042.

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:

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

Skin protection - Hand protection: Protective gloves, oil resistant (EN 374). If applicable Protective nitrile gloves (EN 374). Protective Neoprene® / polychloroprene gloves (EN 374). Minimum layer thickness in mm: 0,5 Permeation time (penetration time) in minutes: >= 240

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 A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.



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Thermal hazards: Not applicable

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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

Solvents content:	Not determined
Surface tension:	Not determined
Conductivity:	Not determined
Fat solubility / solvent:	Not determined
Miscibility:	Not determined
9.2 Other information	
Oxidising properties:	No
Explosive properties:	Product is not explosive.
Viscosity:	8,35 mm2/s (100°C)
Viscosity:	46,8 mm2/s (40°C)
Decomposition temperature:	Not determined
Auto-ignition temperature:	Not determined
Partition coefficient (n-octanol/water):	Not determined
Water solubility:	Insoluble
Solubility(ies):	Not determined
Bulk density:	n.a.
Density:	0,848 g/ml
Vapour density (air = 1):	Not determined
Vapour pressure:	Not determined
Upper explosive limit:	Not determined
Lower explosive limit:	Not determined
Flammability (solid, gas):	n.a.
Evaporation rate:	Not determined
Flash point:	230 °C
Initial boiling point and boiling range:	Not determined
Melting point/freezing point:	Not determined
pH-value:	Not determined
Odour threshold:	Not determined
Odour:	Characteristic
Colour:	Brown
Physical state:	Liquid

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



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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

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

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 -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
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	>5,53	mg/l/4h	Rat	OECD 403 (Acute		
					Inhalation Toxicity)		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,	
					Dermal	Repeated	
					Irritation/Corrosion)	exposure may	
						cause skin	
						dryness or	
						cracking.	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant	
					Irritation/Corrosion)		
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)	
sensitisation:					Sensitisation)		
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative	
					Reverse Mutation Test)		
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative	
					Mammalian		
					Chromosome		
					Aberration Test)		
Germ cell mutagenicity:					OECD 474 (Mammalian	Negative	
					Erythrocyte		
					Micronucleus Test)		
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative	
					Mammalian Cell Gene		
					Mutation Test)		
Carcinogenicity:					OECD 451	Negative	
					(Carcinogenicity Studies)		



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Carcinogenicity:	OECD 453 (Combined Negative
	Chronic
	Toxicity/Carcinogenicity
	Studies)
Reproductive toxicity:	OECD 414 (Prenatal Negative
	Developmental Toxicity
	Study)
Reproductive toxicity:	OECD 421 Negative
	(Reproduction/Developm
	ental Toxicity Screening
	Test)
Specific target organ toxicity -	OECD 408 (Repeated Negative
repeated exposure (STOT-RE):	Dose 90-Day Oral
	Toxicity Study in
	Rodents)
Specific target organ toxicity -	OECD 410 (Repeated Negative
repeated exposure (STOT-RE):	Dose Dermal Toxicity -
	90-Day)
Specific target organ toxicity -	OECD 411 (Subchronic Negative
repeated exposure (STOT-RE):	Dermal Toxicity - 90-day
	Study)
Specific target organ toxicity -	OECD 412 (Subacute Negative
repeated exposure (STOT-RE):	Inhalation Toxicity - 28-
	Day Study)
Aspiration hazard:	Asp. Tox. 1

Foxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous
					Toxicity)	conclusion
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	Analogous
					Dermal Toxicity)	conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,
					Dermal	Analogous
					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,
					Irritation/Corrosion)	Analogous
						conclusion
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact),
						Analogous
						conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
						conclusion
Germ cell mutagenicity:				Mouse	OECD 478 (Genetic	Negative,
					Toxicology - Rodent	Analogous
					dominant Lethal Test)	conclusion
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro	Negative,
					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	
Reproductive toxicity	NOAEL	150	mg/kg	Rat	OECD 414 (Prenatal	Negative
(Developmental toxicity):			bw/d		Developmental Toxicity	
					Study)	
Specific target organ toxicity -	NOAEL	<100	mg/kg	Rat	OECD 408 (Repeated	
repeated exposure (STOT-RE),			bw/d		Dose 90-Day Oral	
oral:					Toxicity Study in	
					Rodents)	

SECTION 12: Ecological information

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



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Molygen New Generation 5W-20							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
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:							

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	96h	>=100	mg/l	Pimephales	OECD 203 (Fish,	
					promelas	Acute Toxicity	
						Test)	
12.1. Toxicity to fish:	LL50	96h	> 100	mg/l	Pimephales	OECD 203 (Fish,	
					promelas	Acute Toxicity	
						Test)	
12.1. Toxicity to daphnia:	EL50	48h	>10000	mg/l	Daphnia magna	OECD 202	
				-		(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OECD 211	
						(Daphnia magna	
						Reproduction Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.1. Toxicity to algae:	EL50	48h	>100	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	46	%		OECD 301 B	
degradability:						(Ready	
5 ,						Biodegradability -	
						Co2 Evolution	
						Test)	
12.3. Bioaccumulative	Log Kow		>6			,	A notable
potential:	Ū						biological
							accumulation
							potential has to
							be expected
							(LogPow > 3).
12.5. Results of PBT							No PBT
and vPvB assessment							substance. No
							vPvB substance
Foxicity to bacteria:	NOEC/NOEL	10min	>1,93	mg/l		DIN 38412 T.8	

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to algae:	NOEC/NOEL	72h	>10	mg/l	Desmodesmus		Analogous
					subspicatus		conclusion
12.2. Persistence and		28d	24	%		OECD 301 C	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Modified MITI	
						Test (I))	



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12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	600	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.2. Persistence and degradability:		28d	1	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable, Analogous conclusion
12.3. Bioaccumulative potential:	Log Pow		>7,6				Concentration in organisms possible.
12.3. Bioaccumulative potential:	BCF		1730				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	Analogous conclusion

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 01 10 mineral based non-chlorinated hydraulic oils

Recommendation:

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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.

15 01 01 paper and cardboard packaging

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

14.1. UN number:



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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 saf	e transport must be followed.
	Annex II of MARPOL and the IBC Code
Non-dangerous material according to Transport Regu	
SECTI	
02011	ON 15: Regulatory information
52011	ON 15: Regulatory information
15.1 Safety, health and environmenta	
15.1 Safety, health and environment Observe restrictions:	al regulations/legislation specific for the substance or mixture
15.1 Safety, health and environmenta	al regulations/legislation specific for the substance or mixture
15.1 Safety, health and environment Observe restrictions: General hygiene measures for the handling of chemic	al regulations/legislation specific for the substance or mixture
15.1 Safety, health and environment Observe restrictions:	al regulations/legislation specific for the substance or mixture
15.1 Safety, health and environment Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC):	al regulations/legislation specific for the substance or mixture
15.1 Safety, health and environmenta Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 %
 15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix 	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures.
 15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix 	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 %
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 15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix 	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures.
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15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
15.1 Safety, health and environmenta Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP):	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
15.1 Safety, health and environmenta Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP):	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
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15.1 Safety, health and environmenta Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP): Not applicable The following phrases represent the posted Hazard C Section 2 and 3).	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
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15.1 Safety, health and environmenta Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP): Not applicable	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP): Not applicable The following phrases represent the posted Hazard C Section 2 and 3). H304 May be fatal if swallowed and enters airways. H413 May cause long lasting harmful effects to aquat	al regulations/legislation specific for the substance or mixture cals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with
15.1 Safety, health and environmental Observe restrictions: General hygiene measures for the handling of chemic Directive 2010/75/EU (VOC): 15.2 Chemical safety assessment A chemical safety assessment is not provided for mix SEC Revised sections: Classification and processes used to the ordinance (EG) 1272/2008 (CLP): Not applicable The following phrases represent the posted Hazard C Section 2 and 3). H304 May be fatal if swallowed and enters airways.	al regulations/legislation specific for the substance or mixture sals are applicable. 0,445 % tures. CTION 16: Other information 3 o derive the classification of the mixture in accordance with class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in ic life.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)



ആ Page 13 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 06.07.2020 / 0006 Replacing version dated / version: 18.07.2019 / 0005 Valid from: 06.07.2020 PDF print date: 09.06.2021 Molygen New Generation 5W-20 AOX Adsorbable organic halogen compounds approx. approximately Article number Art., Art. no. ASTM ASTM International (American Society for Testing and Materials) Acute Toxicity Estimate ATE 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** CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level drv weight dw e.g. for example (abbreviation of Latin 'exempli gratia'), for instance ΕČ European Community ECHA European Chemicals Agency EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances ΕN European Norms United States Environmental Protection Agency (United States of America) FPA etc. et cetera **European Union** FU EVAL Ethylene-vinyl alcohol copolymer Fax number Fax. general gen. GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential IARC International Agency for Research on Cancer IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) Limited Quantities LQ 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 OECD Organisation for Economic Co-operation and Development org. organic 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 Volatile organic compounds VOC vPvB very persistent and very bioaccumulative



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wwt wet weight

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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

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