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

megol Zentralhydraulikoel

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

Relevant identified uses of the substance or mixture:
Hydraulic oil

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Meguin GmbH & Co. KG Mineraloelwerke
Rodener Strasse 25
66740 Saarlouis
Tel.: 06831/89 09-0
Fax: 06831/89 09-62

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)
+1 872 5888271 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Hazard class	Hazard category	Hazard statement
Acute Tox.	4	H332-Harmful if inhaled.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.

2.2 Label elements

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

Danger

H332-Harmful if inhaled. H304-May be fatal if swallowed and enters airways.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
P271-Use only outdoors or in a well-ventilated area.
P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331-Do NOT induce vomiting.
P405-Store locked up.
P501-Dispose of contents / container to an approved waste disposal facility.

EUH208-Contains Di-iso-octyl amino methyl tolutriazole. May produce an allergic reaction.

1-Decene, dimer, hydrogenated
Distillates (petroleum), hydrotreated light naphthenic
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics

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 %).
The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances
n.a.

3.2 Mixtures

1-Decene, dimer, hydrogenated	
Registration number (REACH)	01-2119493069-28-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	500-228-5
CAS	68649-11-6
content %	75-100
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H332 Asp. Tox. 1, H304

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	
Registration number (REACH)	01-2119826592-36-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	934-954-2
CAS	---
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Distillates (petroleum), hydrotreated light naphthenic	
Registration number (REACH)	01-2119480375-34-XXXX
Index	649-466-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	265-156-6
CAS	64742-53-6
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Di-iso-octyl amino methyl tolutriazole	
Registration number (REACH)	01-2119982395-25-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	939-700-4
CAS	---
content %	0,1-<0,25

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411

2,6-di-tert-butyl-p-cresol	
Registration number (REACH)	01-2119555270-46-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	204-881-4
CAS	128-37-0
content %	0,1-<0,25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	
Registration number (REACH)	01-2119777867-13-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	202-414-9
CAS	95-38-5
content %	0,01-<0,1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT RE 2, H373 (gastrointestinal tract, thymus) (oral) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.
For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
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.

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.
Danger of aspiration.
In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.
Gastric lavage (stomach washing) only under endotracheal intubation.
Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
CO2
Foam
Dry extinguisher
Water jet spray
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
Toxic gases
Flammable vapour/air mixtures
5.3 Advice for firefighters
For personal protective equipment see Section 8.
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
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Keep unprotected persons away.
Ensure sufficient supply of air.
Remove possible causes of ignition - do not smoke.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.
6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.
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.
Oil binder
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.

Do not heat to temperatures close to flash point.
Avoid long lasting or intensive contact with skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Do not carry cleaning cloths soaked in product in trouser pockets.
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.
Protect against moisture and store closed.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):
800 mg/m3

GB	**Chemical Name**	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	Content %:1-<10
WEL-TWA: 800 mg/m3	WEL-STEL: ---	---	
Monitoring procedures:	- Draeger - Hydrocarbons 0,1%/c (81 03 571) - Draeger - Hydrocarbons 2/a (81 03 581) - Compur - KITA-187 S (551 174)		
BMGV: ---	Other information: (OEL acc. to RCP-method, paragraphs 84-87, EH40)		

GB	**Chemical Name**	2,6-di-tert-butyl-p-cresol	Content %:0,1-<0,25
WEL-TWA: 10 mg/m3	WEL-STEL: ---	---	
Monitoring procedures:	---		
BMGV: ---	Other information: ---		

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

Distillates (petroleum), hydrotreated light naphthenic						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
Consumer	Human - oral	Long term, systemic effects	DNEL	0,74	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,6	mg/m3	
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	

Di-iso-octyl amino methyl tolutriazole

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,000976	mg/l	
	Environment - marine		PNEC	0,000098	mg/l	
	Environment - sporadic (intermittent) release		PNEC	0,00976	mg/l	
	Environment - sewage treatment plant		PNEC	0,69	mg/l	
	Environment - sediment, freshwater		PNEC	0,0121	mg/kg	
	Environment - sediment, marine		PNEC	0,00121	mg/kg	
	Environment - soil		PNEC	0,00184	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,2	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,2	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,3	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1,3	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,4	mg/kg bw/day	

2,6-di-tert-butyl-p-cresol

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - soil		PNEC	1,04	mg/kg wwt	
	Environment - sewage treatment plant		PNEC	0,17	mg/l	
	Environment - sediment		PNEC	1,29	mg/kg wwt	
	Environment - marine		PNEC	0,02	µg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1,99	µg/l	
	Environment - freshwater		PNEC	0,199	µg/l	
	Environment - oral (animal feed)		PNEC	8,33	mg/kg feed	
	Environment - soil		PNEC	0,04769	mg/kg dw	
	Environment - sediment, freshwater		PNEC	0,0996	mg/kg dw	
	Environment - sediment, marine		PNEC	0,00996	mg/kg dw	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,86	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,25	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,25	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	3,5	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,5	mg/kg bw/day	

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sewage treatment plant		PNEC	0,27	mg/l	
	Environment - sediment, freshwater		PNEC	0,376	mg/kg	
	Environment - sediment, marine		PNEC	0,038	mg/kg	
	Environment - soil		PNEC	0,075	mg/kg	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	2	mg/kg	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	14	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,46	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,06	mg/kg body weight/day	

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

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
If applicable
Protective Neoprene® / polychloroprene gloves (EN ISO 374).
Protective nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:

0,4
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:
If OES or MEL is exceeded.
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:	Green
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	Flammable
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	150 °C
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	19,8 mm2/s (40°C)
Kinematic viscosity:	6,5 mm2/s (100°C)
Solubility:	Insoluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	0,825 g/ml (20°C)
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Product is not explosive.
Oxidising liquids:	No

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
Heating, 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 hazard classes as defined in Regulation (EC) No 1272/2008
Possibly more information on health effects, see Section 2.1 (classification).

megol Zentralhydraulikoel						
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:	ATE	14,5	mg/l/4h			calculated value, Vapours
Acute toxicity, by inhalation:	ATE	2,38	mg/l/4h			calculated value, Aerosol
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
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.

1-Decene, dimer, hydrogenated						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitizising (Analogous conclusion)

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics						
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	>3160	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5266	mg/m3/4 h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant

Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	>5000	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion
Aspiration hazard:						Yes

Distillates (petroleum), hydrotreated light naphthenic

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)	Aerosol, Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:					OECD 421 (Reproduction/Developmental Toxicity Screening Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	100				No indications of such an effect.
Aspiration hazard:						Yes

Di-iso-octyl amino methyl tolutriazole

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3313	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	(Draize-Test)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Yes (skin contact)

Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative, Analogous conclusion
Reproductive toxicity:				Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	45	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	

2,6-di-tert-butyl-p-cresol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2930	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit		Not irritant
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Not irritant
Respiratory or skin sensitisation:				Human being		No (skin contact)
Germ cell mutagenicity:					(Ames-Test)	Negative
Germ cell mutagenicity:				Mouse	in vivo	Negative
Carcinogenicity:	NOAEL	247	mg/kg bw/d	Rat		Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	100	mg/kg	Rat		
Reproductive toxicity (Effects on fertility):	NOAEL	500	mg/kg	Rat		
Specific target organ toxicity - repeated exposure (STOT-RE):	NOEL	25	mg/kg	Rat		(28 d)
Aspiration hazard:						No
Symptoms:						mucous membrane irritation

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1265	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive, Analogous conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Corrosive, Analogous conclusion
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Analogous conclusion

Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative, Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), oral:				Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	Target organ(s): gastrointestinal tract, Target organ(s): thymus

11.2. Information on other hazards

megol Zentralhydraulikoel						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

Distillates (petroleum), hydrotreated light naphthenic						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Other information:	NOAEL	>2000	mg/kg	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).
See section 2.

megol Zentralhydraulikoel							
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 degradability:							Isolate as much as possible with an oil separator.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.

1-Decene, dimer, hydrogenated							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**

12.1. Toxicity to fish:	LL50	96h	>1000	mg/l			
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l			
12.2. Persistence and degradability:		28d	49,2-53,5	%			
12.2. Persistence and degradability:							Not readily biodegradable
12.4. Mobility in soil:	Log Koc		>6,2				

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Water solubility:							Insoluble
12.1. Toxicity to fish:	LC50	96h	>1028	mg/l	Scophthalmus maximus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	LC50	48h	>3193	mg/l	Acartia tonsa	ISO 14669	
12.1. Toxicity to daphnia:	NOELR	21d	>1000	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to algae:	ErL50	72h	>10000	mg/l	Skeletonema costatum	ISO 10253	
12.2. Persistence and degradability:		28d	74	%		OECD 306 (Biodegradability in Seawater)	Readily biodegradable

Distillates (petroleum), hydrotreated light naphthenic

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOELR	14d	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.3. Bioaccumulative potential:	BCF		<500				Low
12.1. Toxicity to fish:	LL50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, 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	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	10	%			Not readily biodegradable
12.2. Persistence and degradability:							Mechanical precipitation possible.
12.2. Persistence and degradability:		28d	31	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily but inherent biodegradable.

12.3. Bioaccumulative potential:	Log Pow		6,0				A notable biological accumulation potential has to be expected (LogPow > 3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Water solubility:							Insoluble

Di-iso-octyl amino methyl tolutriazole

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,3	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	2,05	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	0,976	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,658	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	<10	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradableCO2 formation of the theoretical value
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

2,6-di-tert-butyl-p-cresol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.4. Mobility in soil:	Log Koc		3,9-4,2				
Other information:	Koc		14750				
Other information:	Log Koc		3,9-4,2				
12.1. Toxicity to fish:	LC50	96h	>0,57	mg/l	Brachydanio rerio	84/449/EEC C.1	
12.1. Toxicity to fish:	NOEC/NOEL	42d	0,053	mg/l	Oryzias latipes	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.3. Bioaccumulative potential:			230-2500		Cyprinus carpio	OECD 305 (Bioconcentration - Flow-Through Fish Test)	56d
12.1. Toxicity to daphnia:	EC50	48h	0,45	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,023	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,4	mg/l	Desmodesmus subspicatus	84/449/EEC C.3	

12.1. Toxicity to algae:	EC50	72h	>0,4	mg/l	Desmodesmus subspicatus	84/449/EEC C.3	
12.2. Persistence and degradability:		28d	4,5	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		5,1				High
12.3. Bioaccumulative potential:	BCF		>2000		Cyprinus caprio	OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.4. Mobility in soil:	Koc		14750				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>10000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	AOX						Does not contain any organically bound halogens which can contribute to the AOX value in waste water.
Water solubility:			0,00076	g/l			

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to algae:	EC10	72h	0,014	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.1. Toxicity to fish:	LC50	96h	0,3	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,163	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	0,03	mg/l	Desmodesmus subspicatus	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 biodegradable

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:
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 or ID 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 be followed.

14.7. Maritime transport in bulk according to IMO instruments

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

Observe restrictions:
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):	1,403 %

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 3, 11, 12, 15
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Acute Tox. 4, H332	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.

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).
H314 Causes severe skin burns and eye damage.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
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.

Acute Tox. — Acute toxicity - inhalation
Asp. Tox. — Aspiration hazard
Skin Irrit. — Skin irritation
Skin Sens. — Skin sensitization
Aquatic Acute — Hazardous to the aquatic environment - acute
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Acute Tox. — Acute toxicity - oral
Skin Corr. — Skin corrosion
Eye Dam. — Serious eye damage
STOT RE — Specific target organ toxicity - repeated exposure

Key literature references and sources for data:
Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

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)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate
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
BSEF The International Bromine Council
bw body weight
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
DOC Dissolved organic carbon
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
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)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
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
incl. including, inclusive
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)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic

PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
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:

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