

(GB) Page 1 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0011 Replacing version dated / version: 22.02.2019 / 0010 Valid from: 01.11.2021 PDF print date: 01.11.2021 Common Rail Additive

# 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**

# **Common Rail Additive**

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture: Additives Uses advised against: No information available at present.

#### 1.3 Details of the supplier of the safety data sheet

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

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

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

Telephone number of the company in case of emergencies: +49 (0) 700 / 24 112 112 (LMR) +1 872 5888271 (LMR)

### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

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

Hazard class Asp. Tox. Aquatic Chronic

Hazard category

## Hazard statement

H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

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





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Danger

H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P273-Avoid release to the environment. 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.

EUH044-Risk of explosion if heated under confinement.

EUH066-Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% 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

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	918-481-9
CAS	
content %	60-80
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304

2-Ethylhexylnitrate	
Registration number (REACH)	01-2119539586-27-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	248-363-6
CAS	27247-96-7
content %	10-<25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Acute Tox. 4, H302
	Acute Tox. 4, H312
	Acute Tox. 4, H332
	Aquatic Chronic 2, H411

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.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

**SECTION 4: First aid measures** 



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#### 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.

If the person is unconscious, place in a stable side position and consult a doctor.

#### 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. Immediate admittance to a hospital.

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. Ingestion: Nausea

Vomiting Danger of aspiration. Oedema of the lungs Chemical pneumonitis (condition similar to pneumonia)

#### 4.3 Indication of any immediate medical attention and special treatment needed

Gastric lavage (stomach washing) only under endotracheal intubation.

Pulmonary oedema prophylaxis

Subsequent observation for pneumonia and pulmonary oedema.

**SECTION 5: Firefighting measures** 

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water jet spray/foam/CO2/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 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** 



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### 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.

Ensure sufficient supply of air.

Remove possible causes of ignition - do not smoke.

Avoid inhalation, and 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 surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

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.

#### 6.4 Reference to other sections

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

### **SECTION 7: Handling and storage**

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

## 7.1 Precautions for safe handling

## 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

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.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Do not store with flammable or self-igniting materials. Under all circumstances prevent penetration into the soil.

Protect from direct sunlight and warming.

Store in a well ventilated place.

### 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

Chemical Name

Content %:60-80



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WEL-TWA: 800 mg/m3	WEL-STEL:					
Monitoring procedures:	<ul> <li>Draeger - Hydrocarbons 0,1%/c (81 03 571)</li> </ul>					
	- Draeger - Hydrocarbons 2/a (81 03 581)					
	- Compur - KITA-187 S (551 174)					
BMGV:	Other infor	mation: (OEL acc. to RCP-method,				
	paragraphs	s 84-87, EH40)				

2-Ethylhexylnitrate	E		Description	Malara	11	Nete
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,8	µg/l	
	Environment - marine		PNEC	0,08	µg/l	
	Environment - sediment		PNEC	0,00074	mg/kg dw	
	Environment - soil		PNEC	0,00019	mg/kg dw	
				1		
Consumer	Human - dermal	Long term, systemic	DNEL	0,52	mg/kg	
		effects			bw/day	
Consumer	Human - inhalation	Long term, systemic	DNEL	0,087	mg/m3	
		effects				
Consumer	Human - oral	Long term, systemic	DNEL	0,025	mg/kg	
		effects			bw/day	
Consumer	Human - dermal	Long term, local effects	DNEL	0,022	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic	DNEL	1	mg/kg	
		effects			bw/day	
Workers / employees	Human - inhalation	Long term, systemic	DNEL	0,35	mg/m3	
		effects				
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,044	mg/cm2	

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: Chemical resistant protective gloves (EN ISO 374). If applicable Protective nitrile gloves (EN ISO 374). Protective gloves made of polyvinyl alcohol (EN ISO 374). Protective Viton® / fluoroelastomer gloves (EN ISO 374). Minimum layer thickness in mm: 0,5 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. Gas mask filter A (EN 14387), code colour brown Observe wearing time limitations for respiratory protection equipment.

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

Physical state:	Liquid
Colour:	Red-brown
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:	>63 °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:	<7 mm2/s (40°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:	0,8265 g/ml (15°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.
Explosition.	



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Oxidising liquids:

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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).

Common Rail Additive	Endnoirt	Value	l lmit	Organian	Toot mothed	Neteo
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value Vapours
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h			calculated value Aerosol
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.
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.
Hydrocarbons, C10-C13, n-alka	ines, isoalkan	es, cyclics, <	2% aromatics			
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous

Toxicity / 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	>5000	mg/kg	Rabbit	OECD 402 (Acute	Analogous
					Dermal Toxicity)	conclusion
Acute toxicity, by inhalation:	LC50	>4951	mg/m3/4h	Rat	OECD 403 (Acute	Analogous
					Inhalation Toxicity)	conclusion,
						Vapours
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant,
					Dermal	Analogous
					Irritation/Corrosion)	conclusion



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Serious eye damage/irritation:		OECD 405 (Acute Eye	Not irritant.
		Irritation/Corrosion)	Analogous
			conclusion
Respiratory or skin		OECD 406 (Skin	Not sensitizising
sensitisation:		Sensitisation)	Analogous
		,	conclusion
Germ cell mutagenicity:		OECD 473 (In Vitro	Negative,
<b>3 7</b>		Mammalian	Analogous
		Chromosome	conclusion
		Aberration Test)	
Germ cell mutagenicity:		OECD 474 (Mammalian	Negative,
		Erythrocyte	Analogous
		Micronucleus Test)	conclusion
Germ cell mutagenicity:	Salmonella	OECD 471 (Bacterial	Negative
	typhimurium	Reverse Mutation Test)	
Carcinogenicity:		OECD 453 (Combined	Negative,
		Chronic	Analogous
		Toxicity/Carcinogenicity	conclusion
		Studies)	
Reproductive toxicity:		OECD 414 (Prenatal	Negative,
		Developmental Toxicity	Analogous
		Study)	conclusion
Specific target organ toxicity -		OECD 408 (Repeated	Negative,
repeated exposure (STOT-RE):		Dose 90-Day Oral	Analogous
		Toxicity Study in	conclusion
		Rodents)	
Aspiration hazard:			Yes
Symptoms:			unconsciousness
			, headaches,
			dizziness,
			mucous
			membrane
			irritation

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by dermal route:	-					Experiences on
						persons.,
						Harmful
Acute toxicity, by inhalation:						Experiences on
						persons.,
						Harmful
Acute toxicity, by inhalation:	LCLo	>4,6	mg/l/1h	Rat		Mist
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:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative
					Mammalian Cell Gene	
					Mutation Test)	
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative
					Mammalian	
					Chromosome	
					Aberration Test)	



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Reproductive toxicity:	NOAEL	100	mg/kg bw/d		OECD 421 (Reproduction/Developm ental Toxicity Screening Test)	Negative
Reproductive toxicity				Rat	OECD 414 (Prenatal	Analogous
(Developmental toxicity):					Developmental Toxicity	conclusion
					Study)	
Symptoms:						drying of the
						skin., may cause
						headaches and
						vertigo., nausea,
						drop in blood
						pressure,
						diarrhoea,
						unconsciousness
Specific target organ toxicity -	NOAEL	863	mg/m3	Rat	OECD 413 (Subchronic	Vapours,
repeated exposure (STOT-RE),					Inhalation Toxicity - 90-	Analogous
inhalat.:					Day Study)	conclusion

## 11.2. Information on other hazards

Common Rail Additive						
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.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Other information:						Repeated			
						exposure may			
						cause skin			
						dryness or			
						cracking.			

## **SECTION 12: Ecological information**

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

Common Rail Additive							
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. Endocrine							Does not apply
disrupting properties:							to mixtures.
12.7. Other adverse							No information
effects:							available on
							other adverse
							effects on the
							environment.



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Other information:			Does not contain any organically bound halogens which can contribute to the AOX value in waste water.
Other information:			DOC-elimination degree(complexi ng organic substance)>= 80%/28d: n.a.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT	-						No PBT
and vPvB assessment							substance, No
							vPvB substance
Water solubility:							Product floats or
							the water
							surface.
12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity	
						Test)	
12.1. Toxicity to fish:	NOELR	28d	0,101	mg/l	Oncorhynchus		
					mykiss		
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute	
						Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,176	mg/l	Daphnia magna	,	
12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and		28d	80	%	activated sludge	OECD 301 F	Readily
degradability:						(Ready Biodegradability -	biodegradable
						Manometric	
						Respirometry Test)	
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen		
č				Ŭ	pyriformis		

2-Ethylhexylnitrate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	2	mg/l	Brachydanio rerio	OECD 203 (Fish,	
						Acute Toxicity	
						Test)	
12.1. Toxicity to daphnia:	EC50	48h	>12,6	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC50	72h	3,22	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	1,42	mg/l			
12.2. Persistence and		28d	0	%		OECD 310	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						CO2 in sealed	
						vessels	
						(Headspace Test))	



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12.3. Bioaccumulative potential:	BCF		1332				
12.3. Bioaccumulative potential:	Log Pow		3,74- 5,24				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
12.4. Mobility in soil:	Log Koc		3,75			OECD 121 (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using HPLC)	
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	AOX		0	%			No
Water solubility:							Slight

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods For the substance / mixture / residual amounts

EC disposal code no.:

GB

The waste 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 07 03 other fuels (including mixtures) Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. E.g. suitable incineration plant. **For contaminated packing material** Pay attention to local and national official regulations. Empty container completely. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance.

### **SECTION 14: Transport information**

General statements	
14.1. UN number 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)	



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14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Marine Pollutant: 14.5. Environmental hazards: Transport by air (IATA)

## 14.2. UN proper shipping name:

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14.3. Transport hazard class(es): 14.4. Packing group: 14.5. Environmental hazards:

#### 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** 

n.a.

n.a.

n.a

n.a.

n.a.

Not applicable

Not applicable

### 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):

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

**SECTION 16: Other information** 

Revised sections:

1-16 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
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aquatic Chronic 3, H412	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). H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects. EUH066 Repeated exposure may cause skin dryness or cracking. EUH044 Risk of explosion if heated under confinement. Asp. Tox. — Aspiration hazard Aquatic Chronic - Hazardous to the aquatic environment - chronic Acute Tox. — Acute toxicity - oral Acute Tox. — Acute toxicity - dermal Acute Tox. — Acute toxicity - inhalation

#### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

95,435 %



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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).

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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:

according, according to acc., acc. to Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) Adsorbable organic halogen compounds AOX approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM 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 **Chemical Abstracts Service** CAS 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) FC 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 United States Environmental Protection Agency (United States of America) FPA ErCx,  $E\mu Cx$ , 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 number Fax. gen. general GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc octanol-water partition coefficient Kow IARC International Agency for Research on Cancer International Air Transport Association IATA 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)



ആ Page 14 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0011 Replacing version dated / version: 22.02.2019 / 0010 Valid from: 01.11.2021 PDF print date: 01.11.2021 Common Rail Additive Logarithm of adsorption coefficient of organic carbon in the soil Log Koc Log Kow, Log Pow Logarithm of octanol-water partition coefficient LQ Limited Quantities International Convention for the Prevention of Marine Pollution from Ships MARPOL not applicable n.a. n.av. not available not checked n.c. 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 organic ora. OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic PE 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 тос Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds very persistent and very bioaccumulative vPvB wet weight wwt

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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