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

Revision date / version: 15.06.2023 / 0012

Replacing version dated / version: 21.09.2022 / 0011

Valid from: 15.06.2023 PDF print date: 15.06.2023 Injector Cleaner R579

500 ml Art.: 6110 1040, Art.: 6114 1040

# 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

**Injector Cleaner R579** 

500 ml Art.: 6110 1040, Art.: 6114 1040

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

Cleaner

## Uses advised against:

No information available at present.

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

Theo Förch GmbH & Co. KG Theo-Förch-Str. 11 - 15 74196 Neuenstadt Tel.: 07139/95-0

Fax: 07139/95-199 Email: info@foerch.de Homepage: www.foerch.com

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

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 (TFC)

#### **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
STOT RE	2	H373-May cause damage to organs through prolonged
		or repeated exposure.
Skin Irrit.	2	H315-Causes skin irritation.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.
Aerosol	1	H222-Extremely flammable aerosol.
Aerosol	1	H229-Pressurised container: May burst if heated.

#### 2.2 Label elements



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



#### Danger

H373-May cause damage to organs through prolonged or repeated exposure. H315-Causes skin irritation. H336-May cause drowsiness or dizziness. H412-Harmful to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P260-Do not breathe vapours or spray. P273-Avoid release to the environment. P280-Wear protective gloves.

P312-Call a POISON CENTRE / doctor if you feel unwell.

P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Without adequate ventilation, formation of explosive mixtures may be possible.

Ethyl acetate

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

#### 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**

#### Aerosol

#### 3.1 Substances

# n.a. 3.2 Mixtures

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Registration number (REACH)	01-2119475514-35-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	921-024-6
CAS	
content %	10-<25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 2, H225
	Skin Irrit. 2, H315
	STOT SE 3, H336
	Asp. Tox. 1, H304
	Aquatic Chronic 2, H411

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	(64742-48-9)
content %	10-<25



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Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304

Ethyl acetate	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119475103-46-XXXX
Index	607-022-00-5
EINECS, ELINCS, NLP, REACH-IT List-No.	205-500-4
CAS	141-78-6
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Flam. Liq. 2, H225
	Eye Irrit. 2, H319
	STOT SE 3. H336

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-	
25%)	
Registration number (REACH)	01-2119473977-17-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	919-164-8
CAS	(64742-82-1)
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	STOT RE 1, H372 (central nervous system)
	Asp. Tox. 1, H304
	Aquatic Chronic 3, H412

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119456620-43-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	926-141-6
CAS	
content %	<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304

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**

#### 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

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.



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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.

reddening of the skin
Dermatitis (skin inflammation)

headaches dizziness

Coordination disorders

mental confusion

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

Symptomatic treatment.

## **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media Suitable extinguishing media

CO<sub>2</sub>

Extinction powder

Water jet spray

Large fire:

Water jet spray / alcohol resistant foam

## Unsuitable extinguishing media

High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Toxic gases

Possible build up of explosive/highly flammable vapour/air mixture.

Danger of bursting (explosion) when heated

#### 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.

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

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

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

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



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#### 6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

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

Do not wash away with water or watery cleaning agents.

#### 6.4 Reference to other sections

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

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

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

#### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

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.

Observe special regulations for aerosols!

Do not store with flammable or self-igniting materials.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

Store cool.

Observe special storage conditions.

#### 7.3 Specific end use(s)

No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment.

Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

# **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 Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane						
WEL-TWA: 600 mg/m3	A: 600 mg/m3 WEL-STEL:					
Monitoring procedures:	- Compur - KITA-187 S (551 174)					
BMGV: Other information: (OEL acc. to RCP-method,						
	paragraphs 84-87, EH40)					
(B) Chemical Name Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics						
WEL-TWA: 800 mg/m3	WEL-STEL:					

WEL-TWA: 800 mg/m3	WEL-STEL:	
Monitoring procedures:	<ul> <li>Draeger - Hydrocarbons 0,1%/c (81 03 571)</li> </ul>	
	<ul> <li>Draeger - Hydrocarbons 2/a (81 03 581)</li> </ul>	
	- Compur - KITA-187 S (551 174)	



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BMGV:			Other information: (C paragraphs 84-87, EH	DEL acc. to RCP-method, 40)
Chemical Name	Ethyl acetate			
WEL-TWA: 200 ppm (734 mg/m3)		WEL-STEL: 400 ppm (1468 mg	g/m3) (WEL. EU)	
Monitoring procedures:	- - - - - -	Draeger - Ethyl Acetate 200/a (CH 2 Compur - KITA-111 SA (549 160) Compur - KITA-111 U(C) (549 178) DFG Meth. Nr. 1 (D) (Loesungsmitte 2002 DFG Meth. Nr. 2 (D) (Loesungsmitte 2002 DFG Meth. Nr. 6 (D) (Loesungsmitte 2002 NIOSH 1457 (ETHYL ACETATE) -	elgemische 2), DFG (E) elgemische 3), DFG (E) elgemische 4), DFG (E) 1994	(Solvent mixtures 3) - 2014, (Solvent mixtures 4) - 2014,
	-	NIOSH 2549 (VOLATILE ORGANIC		
BMGV:			Other information:	-
Chemical Name	Hydrocarbons, C1	0-C13, n-alkanes, isoalkanes, cyclic	cs, aromatics (2-25%)	
WEL-TWA: 1000 mg/m3	, , , , , , , , , , , , , , , , , , , ,	WEL-STEL:		
Monitoring procedures:	-	Draeger - Hydrocarbons 0,1%/c (81 Draeger - Hydrocarbons 2/a (81 03 Compur - KITA-187 S (551 174)	03 571) 581)	
BMGV:			Other information: (C paragraphs 84-87, EH	DEL acc. to RCP-method, 40)
Chemical Name	Hvdrocarbons, C1	1-C14, n-alkanes, isoalkanes, cyclic	cs. <2% aromatics	
WEL-TWA: 1200 mg/m3 (>=C7 no chain alkanes)				
Monitoring procedures:	-	Draeger - Hydrocarbons 0,1%/c (81 Draeger - Hydrocarbons 2/a (81 03 Compur - KITA-187 S (551 174)	581)	
BMGV:			Other information:	
Chemical Name	Propane			
WEL-TWA: 1000 ppm (ACGIH)	Порапе	WEL-STEL:		
Monitoring procedures:		Compur - KITA-125 SA (549 954) OSHA PV2077 (Propane) - 1990		
BMGV:			Other information:	-
Chemical Name	Oil mist, mineral			
WEL-TWA: 5 mg/m3 (Mineral oil, working fluids, ACGIH)	excluding metal	WEL-STEL:		
Monitoring procedures:	-	Draeger - Oil Mist 1/a (67 33 031)		
BMGV:			Other information:	-

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - dermal	Long term, systemic effects	DNEL	699	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m3	



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Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - oral	Long term, systemic effects	DNEL	300	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	900	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg	

Ethyl acetate  Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
Area or application	Environmental	Effect off fleatur	Descriptor	value	Onit	Note
	compartment					
	Environment - freshwater		PNEC	0,24	mg/l	
	Environment - marine		PNEC	0,024	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1,65	mg/l	
	Environment - sediment, freshwater		PNEC	1,15	mg/kg	
	Environment - sediment, marine		PNEC	0,115	mg/kg	
	Environment - soil		PNEC	0,148	mg/kg	
	Environment - sewage treatment plant		PNEC	650	mg/l	
	Environment - oral (animal feed)		PNEC	200	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	4,5	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	37	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	367	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	367	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	734	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	734	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	63	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	734	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	734	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	1468	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	1468	mg/m3	

Distillate	Distillates (petroleum), hydrotreated heavy paraffinic									
Area of a	application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note			
		Environmental								
		compartment								
		Environment - oral (animal		PNEC	9,33	mg/kg feed				
		feed)								

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

<sup>(8) =</sup> 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).



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(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 with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN ISO 374).

Recommended

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

>= 0,45

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

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

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.



pH:

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# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state: Aerosol. Active substance: liquid.

Colour: Brown Odour: Characteristic

There is no information available on this parameter. Melting point/freezing point:

Boiling point or initial boiling point and boiling range: There is no information available on this parameter. Flammability: Does not apply to aerosols.

Lower explosion limit: There is no information available on this parameter. Upper explosion limit: There is no information available on this parameter.

-97 °C (The flash-point of the mixture was not tested, but complies Flash point:

with the ingredient with the lowest value.)

Auto-ignition temperature: Does not apply to aerosols.

Decomposition temperature: There is no information available on this parameter.

Mixture is non-soluble (in water). Does not apply to aerosols. Kinematic viscosity:

Solubility: There is no information available on this parameter.

Partition coefficient n-octanol/water (log value): Does not apply to mixtures.

Vapour pressure: 4400 hPa (20°C) Density and/or relative density: ~0,73 g/cm3

Density and/or relative density: 0,81 g/ml (Active substance) Relative vapour density: Does not apply to aerosols. Particle characteristics: Does not apply to aerosols.

9.2 Other information

No information available at present.

#### **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

Pressure increase will result in danger of bursting.

# 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).

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 sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.



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

Endpoint LD50 LD50 LC50	<b>Value</b> >5840 >2800-3100 >20	mg/kg mg/l/4h	Rat Rat	Test method OECD 401 (Acute Oral Toxicity) OECD 402 (Acute	Notes
LD50	>2800-3100	mg/kg		Toxicity)	
			Rat	OECD 402 (Acute	
LC50	>20	mg/l/4h		Dermal Toxicity)	
		····g/ ···	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours
			Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
			Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant (Analogous conclusion)
			Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact
				OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
					Negative
				OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative
					May cause drowsiness or dizziness., STOT SE 3, H336
					Yes
					drowsiness, unconsciousnes
					heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and
					Rabbit OECD 405 (Acute Eye Irritation/Corrosion)  Guinea pig OECD 406 (Skin Sensitisation) OECD 471 (Bacterial Reverse Mutation Test)  OECD 414 (Prenatal

Hydrocarbons, C10-C13, n-alka	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, 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 Toxicity)						
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)						
Acute toxicity, by inhalation:	LC50	>5	mg/m3/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours, Analogous conclusion					
Acute toxicity, by inhalation:	LC50	>4951	mg/m3/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Analogous conclusion, Maximum achievable concentration., Vapours					



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011	1					D / 1
Skin corrosion/irritation:						Repeated
						exposure may
						cause skin
						dryness or
						cracking.,
						Product removes
						fat.
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant,
					Dermal	Analogous
					Irritation/Corrosion)	conclusion,
					milation, comocion,	Repeated
						exposure may
						cause skin
						dryness or
					0505 (05 (4 ) 5	cracking.
Serious eye damage/irritation:					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 474 (Mammalian	Negative,
- com com management,					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Carcinogenicity:					OECD 453 (Combined	Negative,
Garcinogenicity.					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
						CONCIUSION
D 1 0 1 1 1					Studies)	NI d
Reproductive toxicity:					OECD 421	Negative,
					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusion
					Test)	
Reproductive toxicity:	NOAEC	>= 5220	mg/m3	Rat	OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusioninhalat
						ion
Specific target organ toxicity -					OECD 408 (Repeated	No indications of
repeated exposure (STOT-RE):					Dose 90-Day Oral	such an effect.,
					Toxicity Study in	Analogous
					Rodents)	conclusion
Aspiration hazard:					(Noderits)	Yes
						unconsciousness
Symptoms:						
						, headaches,
						dizziness,
						Dermatitis (skin
						inflammation),
						Reddening,
						drying of the
						skin., mucous
						membrane
						irritation, nausea
						and vomiting.,
						diarrhoea, lower
						abdominal pain

Ethyl acetate							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	4934	mg/kg	Rabbit	OECD 401 (Acute Oral Toxicity)		
Acute toxicity, by dermal route:	LD50	>20000	mg/kg	Rabbit			
Acute toxicity, by inhalation:	LC0	29,3	mg/l/4h	Rat		Vapours	



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Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Specific target organ toxicity - single exposure (STOT-SE):						STOT SE 3, H336, May cause drowsiness or dizziness.
Aspiration hazard:						No
Symptoms:	NOAFI					lack of appetite, breathing difficulties, drowsiness, unconsciousness, drop in blood pressure, cornea opacity, coughing, headaches, gastrointestinal disturbances, intoxication, drowsiness, mucous membrane irritation, dizziness, salivation, nausea and vomiting., fatigue
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	900	mg/kg bw/d	Rat	Regulation (EC) 440/2008 B.26 (SUB- CHRONIC ORAL TOXICITY TEST REPEATED DOSE 90 - DAY (RODENTS))	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	0,002	mg/kg	Rat	Regulation (EC) 440/2008 B.29 (SUB- CHRONIC INHALATION TOXICITY STUDY 90- DAY REPEATED (RODENTS))	

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat				
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit				



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Acute toxicity, by inhalation:	LC50	>13,1	mg/l/4h	Rat	
Aspiration hazard:					Yes

Hydrocarbons, C11-C14, n-alka Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	110103
ricute textony, by ordi reate.	LDOO	20000	ing/kg	rat	Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5000	mg/m3/8h	Rat	OECD 403 (Acute	Vapours
					Inhalation Toxicity)	
Skin corrosion/irritation:					OECD 404 (Acute	Analogous
					Dermal	conclusion,
					Irritation/Corrosion)	Drying of the
						skin., Dermatitis
						inflammation)
Serious eye damage/irritation:					OECD 405 (Acute Eye	Analogous
conductor of damage/initiation.					Irritation/Corrosion)	conclusion,
						Slightly irritant
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:				3	Sensitisation)	contact),
					,	Analogous
						conclusion
Germ cell mutagenicity:				Mouse	in vivo	Negative
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
Cours call results are relaits a					OF CD 472 (In Vitro	conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian	Negative
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative,
com our matagomony.				Modeo	Mammalian Cell Gene	Analogous
					Mutation Test)	conclusion
Carcinogenicity:					OECD 453 (Combined	Analogous
					Chronic	conclusion,
					Toxicity/Carcinogenicity	Negative
					Studies)	
Reproductive toxicity:					OECD 414 (Prenatal	Analogous
					Developmental Toxicity	conclusion,
Specific target organ toxicity -					Study)	Negative Analogous
single exposure (STOT-SE):						conclusion, No
single exposure (OTOT GE).						indications of
						such an effect.
Specific target organ toxicity -	NOAEL	>=1000	mg/kg	Rat	OECD 408 (Repeated	
repeated exposure (STOT-RE):			bw/d		Dose 90-Day Oral	
					Toxicity Study in	
					Rodents)	
Aspiration hazard:	1					Yes
Symptoms:						drying of the
						skin.,
						headaches,
						fatigue,
						dizziness, nausea,
						diarrhoea,

Propane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Acute toxicity, by inhalation:	LC50	260000	ppmV/4h	Rat		Gasses, Male, Analogous conclusion



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Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEC	21,641	mg/l		OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Aspiration hazard:						No
Symptoms:						breathing difficulties, unconsciousness, frostbite, headaches, cramps, mucous membrane irritation, dizziness, nausea and vomiting.
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	7,214	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	-
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	LOAEL	21,641	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	

## 11.2. Information on other hazards

Injector Cleaner R579						
500 ml Art.: 6110 1040, Art.: 611	4 1040					
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.

# **SECTION 12: Ecological information**

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

Injector Cleaner R579							
500 ml Art.: 6110 1040, A	rt.: 6114 1040						
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.



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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.
Other information:					DOC-elimination degree(complexi ng organic substance)>= 80%/28d: No
Other information:	AOX	0	%		According to the recipe, contains no AOX.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	28d	2,045	mg/l	Oncorhynchus		
·					mykiss		
12.1. Toxicity to fish:	NOELR	28d	2,04	mg/l	Salmo gairdneri		
12.1. Toxicity to fish:	LC50	96h	11,4	mg/l	Oncorhynchus	OECD 203 (Fish,	
, , , , ,			,	3	mykiss	Acute Toxicity Test)	
12.1. Toxicity to fish:	LL50	96h	11,4	mg/l	Salmo gairdneri	OECD 203 (Fish,	
12.1. TOXICITY TO HISH.	LLSO	3011	11,4	ilig/i	Saimo gandnen	Acute Toxicity	
10.1 T : '' :	5050	401				Test)	
12.1. Toxicity to daphnia:	EC50	48h	3	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	NOELR	48h	2,1	mg/l	Daphnia magna	0-0-111	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,17	mg/l	Daphnia magna	OECD 211	
						(Daphnia magna	
						Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	30-100	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	81	%		OECD 301 F	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	_
						Manometric	
						Respirometry Test)	
12.3. Bioaccumulative						, , ,	Concentration in
potential:							organisms
							possible.
12.3. Bioaccumulative	BCF		242-253				
potential:	**						
12.4. Mobility in soil:							Adsorption in
,							ground., Produc
							is slightly volatile
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
and vi vb assessment							vPvB substance
Other information:	AOX	+	0	%			VI VD SUDSIGIICE
Outor illioittiation.	ΛΟΛ		0	/0		1	

Hydrocarbons, C10-C13	, n-alkanes, isoa	lkanes, cyc	:lics, <2% a	romatics			
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOELR	28d	0,10	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
					,	,	



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12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,18	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	80	%		OECD 301 F	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Manometric	
						Respirometry Test)	
12.3. Bioaccumulative potential:	Log Pow		5,5-7,2				
12.4. Mobility in soil:	Log Koc		>3				Product is
-							slightly volatile.
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
12.7. Other adverse							Product floats on
effects:							the water
							surface.
Water solubility:			~10	mg/l			Slight

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	32d	<9,65	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	230	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	48h	333	mg/l	Leuciscus idus		
12.1. Toxicity to daphnia:	EC50	48h	610	mg/l	Daphnia magna	DIN 38412 T.11	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	2,4	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	165	mg/l			Daphnia cucullata
12.1. Toxicity to algae:	EC50	48h	5600	mg/l	Desmodesmus subspicatus	DIN 38412 T.9	
12.1. Toxicity to algae:	NOEC/NOEL	96h	2000	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	96h	>2000	mg/l	Pseudokirchneriell a subcapitata	OEĆD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	>100	mg/l	Desmodesmus subspicatus	OEĆD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	48h	3300	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:		20d	79	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF	72h	30			,	(Fish)



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12.3. Bioaccumulative potential:	Log Kow		0,68			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	Bioaccumulation is unlikely (LogPow < 1).25 °C
12.4. Mobility in soil:	H (Henry)		0,00012	atm*m3/m ol			
12.4. Mobility in soil:	Koc		3				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	16h	2900	mg/l	Escherichia coli		
Toxicity to bacteria:	EC50	15min	5870	mg/l	Photobacterium phosphoreum		
Toxicity to bacteria:	EC10	18h	2900	mg/l	Pseudomonas putida	DIN 38412 T.8	

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LL50	96h	10-100	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	NOELR	28d	0,091	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	NOELR	21d	0,28	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,097	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	EL50	48h	100-220	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EL50	72h	10-100	mg/l	Pseudokirchneriell		
					a subcapitata		
12.2. Persistence and degradability:		28d	74,7	%			

Hydrocarbons, C11-C14,	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics						
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOELR	28d	0,17	mg/l	Oncorhynchus	QSAR	
					mykiss		
12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus	OECD 203 (Fish,	
					mykiss	Acute Toxicity	
						Test)	
12.1. Toxicity to daphnia:	NOELR	21d	1,22	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
10.0 B		00.1		0/		Test)	D 17
12.2. Persistence and		28d	69	%		OECD 301 F	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Manometric	
40.0 Diagonarylatics	Las Daw					Respirometry Test)	I II ada
12.3. Bioaccumulative	Log Pow		6-8				High
potential: 12.5. Results of PBT							No PBT
							-
and vPvB assessment							substance, No
Motor colubility							vPvB substance Insoluble
Water solubility:							ITISOIUDIE

Propane							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes



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12.3. Bioaccumulative	Log Pow	2,28		A notable
potential:				biological
				accumulation
				potential is not to
				be expected
				(LogPow 1-3).
12.5. Results of PBT				No PBT
and vPvB assessment				substance, No
				vPvB substance

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

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)

14 06 03 other solvents and solvent mixtures

16 05 04 gases in pressure containers (including halons) containing hazardous substances

20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Take full aerosol cans to problem waste collection.

Take emptied aerosol cans to valuable material collection.

## For contaminated packing material

Pay attention to local and national official regulations.

15 01 04 metallic packaging

15 01 10 packaging containing residues of or contaminated by hazardous substances

Do not perforate, cut up or weld uncleaned container.

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

#### **General statements**

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number: 1950

14.2. UN proper shipping name:

**UN 1950 AEROSOLS** 

14.3. Transport hazard class(es): 2.1

14.4. Packing group:

14.5. Environmental hazards: Not applicable

Tunnel restriction code: Classification code: 5F IO: 1 I

Transport category: 2

Transport by sea (IMDG-code)

14.1. UN number or ID number: 1950

14.2. UN proper shipping name:

**UN 1950 AEROSOLS** 

14.3. Transport hazard class(es): 2.1

14.4. Packing group:

14.5. Environmental hazards: Not applicable Marine Pollutant: Not applicable F-D, S-U

Transport by air (IATA)

14.1. UN number or ID number: 1950

14.2. UN proper shipping name:

UN 1950 Aerosols, flammable

14.3. Transport hazard class(es): 2.1 14.4. Packing group:

14.5. Environmental hazards: Not applicable









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## 14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained. All persons involved in transporting must observe safety regulations. Precautions must be taken to prevent damage.

## 14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

#### **SECTION 15: Regulatory information**

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Regulation (EC) No 1907/2006, Annex XVII

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered

according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for the	referred to in Article 3(10) for the
		application of - Lower-tier	application of - Upper-tier
		requirements	requirements
P3a	11.1	150 (netto)	500 (netto)

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 2 - This product contains the substances listed below:

Entry Nr	Dangerous substances	Notes to Annex I	Qualifying quantity (tonnes) for the application of - Lower-tier	Qualifying quantity (tonnes) for the application of - Upper-tier
			requirements	requirements
18	Liquefied flammable	19	50	200
	gases, Category 1 or 2			
	(including LPG) and			
	natural gas			

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC):

60,31 %

#### REGULATION (EC) No 648/2004

30 % and more aliphatic hydrocarbons less than 5 % aromatic hydrocarbons

Observe incident regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

Revised sections:

2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16

Employee training in handling dangerous goods is required.

These details refer to the product as it is delivered.



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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	Evaluation method used
(EC) No. 1272/2008 (CLP)	
STOT RE 2, H373	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.
Aerosol 1, H222	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on the form or physical state.

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).

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

STOT RE — Specific target organ toxicity - repeated exposure

Skin Irrit. — Skin irritation

Asp. Tox. — Aspiration hazard STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Aguatic Chronic — Hazardous to the aquatic environment - chronic

Aerosol — Aerosols

Flam. Liq. — Flammable liquid

Eye Irrit. — Eye irritation

#### **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.

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## 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 International Carriage of Dangerous Goods by Road)

Adsorbable organic halogen compounds AOX

approx. approximately

Article number Art., Art. no.

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

BCF Bioconcentration factor

**BSEF** The International Bromine Council

body weight hw

CAS Chemical Abstracts Service

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

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon

dw dry weight

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

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

ΕN European Norms

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

ErCx,  $E\mu Cx$ , ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

et cetera etc. EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number aen.

Globally Harmonized System of Classification and Labelling of Chemicals GHS

**GWP** Global warming potential



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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 applicablen.av. not availablen.c. not checkedn.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

REACHRegistration, 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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