

## Safety Data Sheet

according to UK REACH Regulation

### ESD-Cleaner

Revision date: 23.02.2023

Product code: 5656

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

ESD-Cleaner

UFI: 8A9T-VCTM-9F0G-0GK3

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

#### Use of the substance/mixture

All-purpose (or multi-purpose) non-abrasive cleaners; Consumer uses, Professional uses, Industrial uses.

#### Uses advised against

This information is not available.

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

Company name:	Wolfgang Warmbier GmbH & Co. KG	
	Systeme gegen Elektrostatik	
Street:	Untere Gießwiesen 21	
Place:	D-78247 Hilzingen	
Telephone:	+497731-8688-0	Telefax: +497731-8688-30
e-mail:	info@warmbier.com	
Contact person:	Jürgen Speicher	Telephone: +497731-8688-11
e-mail:	juergen.speicher@warmbier.com	
Internet:	www.warmbier.com	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Flam. Liq. 3; H226

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

Signal word: Warning

Pictograms:



#### Hazard statements

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves and eye/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use water to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

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P501 Dispose of contents/container to an appropriate recycling or disposal facility.

#### Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP].

#### 2.3. Other hazards

Frequently or prolonged contact with skin may cause dermal irritation.

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Endocrine disrupting properties: This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
67-63-0	Propan-2-ol, Isopropyl alcohol			5 - < 10 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
111-76-2	2-Butoxyethanol			1 - < 5 %
	203-905-0	603-014-00-0	01-2119475108-36	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H332 H312 H302 H315 H319			
34590-94-8	(2-Methoxymethylethoxy)propanol			1 - < 5 %
	252-104-2		01-2119450011-60	
122-99-6	2-phenoxyethanol			1 - < 5 %
	204-589-7	603-098-00-9	01-2119488943-21	
	Acute Tox. 4, Eye Dam. 1, STOT SE 3; H302 H318 H335			

Full text of H and EUH statements: see section 16.

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
67-63-0	200-661-7	Propan-2-ol, Isopropyl alcohol	5 - < 10 %
		inhalation: LC50 = 30 mg/l (vapours); dermal: LD50 = 12400 mg/kg; oral: LD50 = 5050 mg/kg	
111-76-2	203-905-0	2-Butoxyethanol	1 - < 5 %
		inhalation: LC50 = 523 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1060 mg/kg; oral: ATE 1200 mg/kg	
34590-94-8	252-104-2	(2-Methoxymethylethoxy)propanol	1 - < 5 %
		inhalation: LC50 = 55 - 60 mg/l (vapours); dermal: LD50 = 9510 mg/kg; oral: LD50 = > 5000 mg/kg	
122-99-6	204-589-7	2-phenoxyethanol	1 - < 5 %
		dermal: LD50 = > 2214 mg/kg; oral: ATE 1394 mg/kg	

#### Labelling for contents according to Regulation (EC) No 648/2004

< 5 % anionic surfactants, < 5 % phosphates, preservation agents (Phenoxyethanol).

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### After inhalation

Provide fresh air.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye. Remove contact lenses, if present and easy to do.

Continue rinsing.

#### After ingestion

Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Following inhalation: Dizziness, Dizziness.

Following skin contact: Has degreasing effect on the skin. Mild skin irritation, irritation of mucous membranes.

After eye contact: Acute eye irritation/corrosion, redness.

Following ingestion: Nausea, Vomiting, Gastrointestinal complaints.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Water spray jet, alcohol resistant foam, Dry extinguishing powder (ABC-powder, BC-powder), Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable extinguishing media

Full water jet.

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

Flammable. Vapours can form explosive mixtures with air.

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Pyrolysis products, toxic.

Heating causes rise in pressure with risk of bursting.

Special danger of slipping by leaking/spilling product.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Fire class B (Fires of liquids or liquid turning substances)

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

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#### For non-emergency personnel

Use personal protection equipment.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove persons to safety.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Suppress gases/vapours/mists with water spray jet. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

##### For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

##### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clear contaminated areas thoroughly. Wash with plenty of water.

##### Other information

Ventilate affected area.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advice on safe handling

Provide adequate ventilation. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes and clothes.

##### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Vapours can form explosive mixtures with air.

##### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

Keep away from: Food and feedingstuffs.

##### Further information on storage conditions

Keep at temperatures between 5 and 25°C. Protect against: Heat, UV-radiation/sunlight, Frost.

Maximum storage period (time): at least 24 months from production date.

#### 7.3. Specific end use(s)

All-purpose (or multi-purpose) non-abrasive cleaners; Consumer uses, Professional uses, Industrial uses.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
34590-94-8	(2-methoxymethylethoxy) propanol	50	308		TWA (8 h)	WEL
111-76-2	2-Butoxyethanol	25	123		TWA (8 h)	WEL
		50	246		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

#### Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
111-76-2	2-Butoxyethanol	butoxyacetic acid (creatinine)	240 mmol/mol	urine	Post shift

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#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-63-0	Propan-2-ol, Isopropyl alcohol			
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	500 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m <sup>3</sup>
111-76-2	2-Butoxyethanol			
Worker DNEL, acute		dermal	systemic	89 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	1091 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	426 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	44,5 mg/kg bw/day
Worker DNEL, acute		inhalation	local	246 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	75 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	98 mg/m <sup>3</sup>
Consumer DNEL, acute		oral	systemic	26,7 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	147 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	6,3 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	59 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	38 mg/kg bw/day
34590-94-8	(2-Methoxymethylethoxy)propanol			
Worker DNEL, long-term		inhalation	systemic	308 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	283 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	37,2 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	121 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	36 mg/kg bw/day
122-99-6	2-phenoxyethanol			
Consumer DNEL, long-term		dermal	systemic	10,42 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	9,23 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,41 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	9,23 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	20,83 mg/person/day
Worker DNEL, long-term		dermal	systemic	20,83 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	2,5 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	2,41 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	5,7 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	5,7 mg/m <sup>3</sup>

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#### PNEC values

CAS No	Substance	Value
Environmental compartment		
67-63-0	Propan-2-ol, Isopropyl alcohol	
Freshwater		140,9 mg/l
Freshwater (intermittent releases)		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Secondary poisoning		160 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil		28 mg/kg
111-76-2	2-Butoxyethanol	
Freshwater		8,8 mg/l
Freshwater (intermittent releases)		26,4 mg/l
Marine water		0,88 mg/l
Freshwater sediment		34,6 mg/kg
Marine sediment		3,46 mg/kg
Secondary poisoning		20 mg/kg
Micro-organisms in sewage treatment plants (STP)		463 mg/l
Soil		2,33 mg/kg
34590-94-8	(2-Methoxymethylethoxy)propanol	
Freshwater		19 mg/l
Freshwater (intermittent releases)		190 mg/l
Marine water		1,9 mg/l
Freshwater sediment		70,2 mg/kg
Marine sediment		7,02 mg/kg
Micro-organisms in sewage treatment plants (STP)		4168 mg/l
Soil		2,74 mg/kg
122-99-6	2-phenoxyethanol	
Freshwater		0,943 mg/l
Freshwater (intermittent releases)		3,44 mg/l
Marine water		0,094 mg/l
Freshwater sediment		7,237 mg/kg
Marine sediment		0,724 mg/kg
Micro-organisms in sewage treatment plants (STP)		36 mg/l
Soil		1,31 mg/kg

#### 8.2. Exposure controls



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#### Appropriate engineering controls

Provide adequate ventilation. Do not breathe mist/vapours/spray.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection: goggles.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: Butyl caoutchouc (butyl rubber), Thickness of the glove material: 0,5 mm, Breakthrough time: 480 min; FKM (fluoro rubber), Thickness of the glove material: 0,7 mm, Breakthrough time: 480 min; NBR (Nitrile rubber), Thickness of the glove material: 0,4 mm, Breakthrough time: 120 min. Wear cotton undermitten if possible.

Unsuitable material: NR (natural rubber, Natural latex), CR (polychloroprene, chloroprene rubber), PVC (polyvinyl chloride).

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

Usually no personal respirative protection necessary. In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: aerosol or mist formation. Suitable respiratory protection apparatus: Filtering device (full mask or mouthpiece) with filter: A-P2, A-P3, Combination filtering device ABEK-P2.

##### Thermal hazards

not relevant.

##### Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	blue, clear
Odour:	mild fruity
Odour threshold:	not determined
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	82,5 °C
Flammability	
Solid/liquid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	38 °C
Auto-ignition temperature:	230 °C
Decomposition temperature:	not determined
pH-Value (at 20 °C):	4,5 - 5,5
Water solubility:	completely miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined



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Vapour pressure:  
(at 20 °C) 23,4 hPa  
Density (at 20 °C): 0,99 g/cm<sup>3</sup>  
Relative vapour density: not determined

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

###### Explosive properties

The product is not: Explosive.

###### Oxidizing properties

The product is not: oxidising.

##### **Other safety characteristics**

Evaporation rate: not determined

Solid content: not determined

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

Flammable.

#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

No known hazardous reactions.

#### **10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

#### **10.5. Incompatible materials**

No information available.

#### **10.6. Hazardous decomposition products**

No known hazardous decomposition products. Hazardous combustion products: See also section 5.

### SECTION 11: Toxicological information

#### **11.1. Information on hazard classes as defined in GB CLP Regulation**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

##### **ATEmix calculated**

ATE (oral) 22679,0 mg/kg; ATE (dermal) 26500,0 mg/kg; ATE (inhalation vapour) 275,00 mg/l; ATE (inhalation dust/mist) 37,500 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-63-0	Propan-2-ol, Isopropyl alcohol				
	oral	LD50 5050 mg/kg	Rat	Publication (1978)	
	dermal	LD50 12400 mg/kg	Rabbit	Publication (1974)	
	inhalation (4 h) vapour	LC50 30 mg/l	Rat		
111-76-2	2-Butoxyethanol				
	oral	ATE 1200 mg/kg			
	dermal	LD50 1060 mg/kg	Rabbit	Study report (1994)	OECD 402
	inhalation (4 h) vapour	LC50 523 mg/l	Rat	Study report (1980)	OECD 403
	inhalation dust/mist	ATE 1,5 mg/l			
34590-94-8	(2-Methoxymethylethoxy)propanol				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1979)	OECD 401
	dermal	LD50 9510 mg/kg	Rabbit	Publication (1961)	OECD 402
	inhalation (4 h) vapour	LC50 55 - 60 mg/l	Rat		
122-99-6	2-phenoxyethanol				
	oral	ATE 1394 mg/kg			
	dermal	LD50 > 2214 mg/kg	Rabbit	Publication (1980)	other: Draft IRLG

#### Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Other information

Has degreasing effect on the skin.

#### Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### SECTION 12: Ecological information

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#### 12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
67-63-0	Propan-2-ol, Isopropyl alcohol					
	Acute fish toxicity	LC50 mg/l	10000	96 h	Pimephales promelas (fathead minnow)	Publication (1983) OECD 203
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	13299	48 h	Daphnia magna (Big water flea)	Information taken from reference works and the literature.
	Acute bacteria toxicity	(EC50 mg/l)	> 1000		Activated sludge	
111-76-2	2-Butoxyethanol					
	Acute fish toxicity	LC50 mg/l	1474	96 h	Oncorhynchus mykiss (Rainbow trout)	Publication (2002) OECD 203
	Acute algae toxicity	ErC50	911 mg/l	72 h	Raphidocelis subcapitata	Publication (2002) OECD 201
	Acute crustacea toxicity	EC50 mg/l	1550	48 h	Daphnia magna (Big water flea)	Publication (2002) OECD 202
	Fish toxicity	NOEC mg/l	> 100	21 d	Danio rerio (zebrafish)	Publication (2002) OECD 204
	Crustacea toxicity	NOEC	100 mg/l	21 d	Daphnia magna (Big water flea)	Publication (2002) OECD 211
34590-94-8	(2-Methoxymethylethoxy)propanol					
	Acute fish toxicity	LC50 mg/l	> 1000	96 h	Poecilia reticulata (Guppy)	Study report (1990) OECD 203
	Acute algae toxicity	ErC50 mg/l	> 969	72 h	Pseudokirchneriella subcapitata	Study report (2001) OECD 201
	Acute crustacea toxicity	EC50 mg/l	1919	48 h	Daphnia magna (Big water flea)	Study report (1979) OECD 202
	Algae toxicity	NOEC	969 mg/l	3 d	Pseudokirchneriella subcapitata	
	Crustacea toxicity	NOEC mg/l	>= 0,5	22 d	Daphnia magna (Big water flea)	Study report (1995) OECD 211
122-99-6	2-phenoxyethanol					
	Acute fish toxicity	LC50	344 mg/l	96 h	Pimephales promelas (fathead minnow)	Publication (1984) other: ASTM method
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	Study report (2012) OECD 201
	Acute crustacea toxicity	EC50 mg/l	> 500	48 h	Daphnia magna (Big water flea)	Study report (1989) other: 79/831/EEC, appendix V, part C
	Fish toxicity	NOEC	23 mg/l	34 d	Pimephales promelas (fathead minnow)	Study report (2005) OECD 210
	Crustacea toxicity	NOEC mg/l	9,43	21 d	Daphnia magna (Big water flea)	Study report (2006) OECD 211
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	0,5 h	Activated sludge	Study report (2002) OECD 209

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#### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
67-63-0	Propan-2-ol, Isopropyl alcohol				
	Biodegradation, Activated sludge	53 %		5	
	Readily biodegradable (according to OECD criteria).				
111-76-2	2-Butoxyethanol				
	Biodegradation, CO <sub>2</sub> formation (% of the theoretical value).	18,3		3	
	Readily biodegradable (according to OECD criteria).				
34590-94-8	(2-Methoxymethylethoxy)propanol				
	Biodegradation, OECD 301F, DOC reduction	96 %		28	Echa
	Readily biodegradable (according to OECD criteria).				
	Biodegradation, OECD 301F, Carbon dioxide	76 %		28	Echa
	Readily biodegradable (according to OECD criteria).				
	Biodegradation, OECD 301F, Oxygen	75 %		10	Echa
	Readily biodegradable (according to OECD criteria).				
122-99-6	2-phenoxyethanol				
	Biodegradation, OECD 301F	99%		28	
	Readily biodegradable (according to OECD criteria).				

#### 12.3. Bioaccumulative potential

The product has not been tested.

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-63-0	Propan-2-ol, Isopropyl alcohol	0,05
111-76-2	2-Butoxyethanol	0,81
34590-94-8	(2-Methoxymethylethoxy)propanol	0,004
122-99-6	2-phenoxyethanol	1,16

##### BCF

CAS No	Chemical name	BCF	Species	Source
122-99-6	2-phenoxyethanol	0,349		EpiSuite QSAR tool (2007)

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

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#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

##### List of Wastes Code - residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

##### List of Wastes Code - used product

200130 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents other than those mentioned in 20 01 29

##### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.  
Clean container with water.

#### SECTION 14: Transport information

##### Land transport (ADR/RID)

**14.1. UN number or ID number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Special Provisions: 274  
Limited quantity: 5 L  
Excepted quantity: E1  
Transport category: 3  
Hazard No: 30  
Tunnel restriction code: D/E

##### Other applicable information (land transport)

box 6 bottles 1000 mL, box 2 canisters 5 L: Transport as "limited quantity" according to chapter 3.4 ADR/RID

##### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Special Provisions: 274

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Limited quantity: 5 L

Excepted quantity: E1

**Other applicable information (inland waterways transport)**

box 6 bottles 1000 mL, box 2 canisters 5 L: Transport as "limited quantity" according to chapter 3.4. ADN

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1993

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL)

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3



Special Provisions: 223, 274, 955

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-E, S-E

Segregation group: ---

**Other applicable information (marine transport)**

box 6 bottles 1000 mL, box 2 canisters 5 L: Transport as "limited quantity" according to IMDG-Code 3.4

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1993

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL)

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3



Special Provisions: A3

Limited quantity Passenger: 10 L

Passenger LQ: Y344

Excepted quantity: E1

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 220 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Safe handling: see section 7

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

No transport as bulk according to IBC Code.

## SECTION 15: Regulatory information

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

2010/75/EU (VOC): 16,5 % (163 g/l)

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Information according to 2012/18/EU  
(SEVESO III):

P5c FLAMMABLE LIQUIDS

#### National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Propan-2-ol, Isopropyl alcohol  
2-Butoxyethanol

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 1,7,8,9,10,13.

#### Abbreviations and acronyms

CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
CAS: Chemical Abstracts Service  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
IMDG: International Maritime Code for Dangerous Goods  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

#### Key literature references and sources for data

To create the safety data sheet information from our suppliers, information on chemicals from the European

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Chemicals Agency (ECHA) and data from the GESTIS substance database were used.

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Eye Irrit. 2; H319	Calculation method

#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*