

Page 1 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

# 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**

# **KUEHLER DICHTER 150 mL**

## Art.: 3330

അ

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

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC16 - Heat transfer fluids

Process category [PROC]:

PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 - Use of functional fluids in small devices

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 9a - Widespread use of functional fluid (indoor)

ERC 9b - Widespread use of functional fluid (outdoor)

#### Uses advised against:

No information available at present.

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

œ

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany Phone:(+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)

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixtureClassification according to Regulation (EC) 1272/2008 (CLP)Hazard classHazard categoryHazard statement



Page 2 of 14

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

2

STOT RE

H373-May cause damage to organs through prolonged or repeated exposure.

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



Warning

H373-May cause damage to organs through prolonged or repeated exposure.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P260-Do not breathe vapours or spray.

P314-Get medical advice / attention if you feel unwell.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH208-Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Ethanediol

#### 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 %).

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substance

<sup>n.a.</sup> 3.2 Mixture	
Ethanediol	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119456816-28-XXXX
Index	603-027-00-1
EINECS, ELINCS, NLP	203-473-3
CAS	107-21-1
content %	10-<20
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302
	STOT RE 2, H373 (kidneys) (oral)
Disodium tetraborate pentahydrate	SVHC-substance
Registration number (REACH)	
Index	005-011-02-9
EINECS, ELINCS, NLP	215-540-4
CAS	12179-04-3
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP)	Repr. 1B, H360FD



Page 3 of 14

അ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

Sodium nitrite	
Registration number (REACH)	01-2119471836-27-XXXX
Index	007-010-00-4
EINECS, ELINCS, NLP	231-555-9
CAS	7632-00-0
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP)	Ox. Sol. 3, H272
	Acute Tox. 3, H301
	Eye Irrit. 2, H319
	Aquatic Acute 1, H400 (M=1)

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-	
2H-isothiazol-3-one (3:1)	
Registration number (REACH)	
Index	613-167-00-5
EINECS, ELINCS, NLP	
CAS	55965-84-9
content %	0,001-<0,0015
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 3, H301
	Acute Tox. 2, H310
	Skin Corr. 1C, H314
	Skin Sens. 1A, H317
	Eye Dam. 1, H318
	Acute Tox. 2, H330
	Aquatic Acute 1, H400 (M=100)
	Aquatic Chronic 1, H410 (M=100)

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

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

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult 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.

If applicable Induce vomiting.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media



Page 4 of 14

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

#### Suitable extinguishing media

Product is not combustible. Adapt to the nature and extent of fire.

#### 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 Toxic gases

#### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. Dispose of contaminated extinction water according to official regulations.

## **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away. Ensure sufficient supply of air. Avoid contact with eyes or skin. If applicable, caution - risk of slipping.

#### 6.2 Environmental precautions

If leakage occurs, dam up. Resolve leaks if this possible without risk. Prevent from entering drainage system.

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

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

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

#### 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 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 oxidizing agents. Store in a well ventilated place.

## 7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection



B Page 5 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

## 8.1 Control parameters

GB Chemical Name	Ethanediol				С	ontent %:10- <20
WEL-TWA: 10 mg/m3 (part (vapour) (WEL), 20 ppm (52 r Monitoring procedures:	mg/m3) (EU) (10 - Comp	EL-STEL: 104 mg/m3 (vap 04 mg/m3) (EU) our - KITA-232 SA (502 342)		) ppm		
	- Draeg - NIOS OSH/	bur - KITA-232 SB (550 267) ger - Ethylene Glycol 10 (5) ( H 5523 (Glycols) - 1996 A PV2024 (Ethylene glycol) - (2004)	(81 01 351) - 1999 - EU pro			
BMGV:			Other infor	mation: S	sk (particulate, v	/apour)
Chemical Name	Disodium tetraborate pe	entahydrate			Co	ntent %:0,1-<1
WEL-TWA: 1 mg/m3		EL-STEL:				· · ·
Monitoring procedures:						
BMGV:			Other infor	mation:	-	
Ethanediol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	10	mg/l	
	Environment - marine		PNEC	1	mg/l	
	Environment - sediment		PNEC	20,9	mg/kg	
	Environment - soil		PNEC	1,53	mg/kg	
	Environment - sewage treatment plant		PNEC	199,5	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	37	mg/kg dry weight	
	Environment - sediment, marine		PNEC	3,7	mg/kg dry weight	
Consumer	Human - inhalation	Long term, local effects	DNEL	7	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	53	mg/kg	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	35	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	106	mg/kg	

rea of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,0054	mg/l	
	Environment - marine		PNEC	0,00616	mg/l	
	Environment - sewage treatment plant		PNEC	21	mg/l	
	Environment - sediment, freshwater		PNEC	0,019	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,022	mg/kg dry weight	
	Environment - soil		PNEC	0,00073 3	mg/kg	



Page 6 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

	Environment - sewage treatment plant		PNEC	21	mg/kg	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	2	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2	mg/m3	

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

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | 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.

## 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. BS EN 14042.

BS 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:

ആ

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Rubber gloves (EN 374). Protective nitrile gloves (EN 374). Minimum layer thickness in mm: 0,35 Permeation time (penetration time) in minutes: > 480 Protective hand cream recommended. The recommended maximum wearing time is 50% of breakthrough time. The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary. 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

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.



Page 7 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

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.

ആ

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

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

Physical state:	Liquid
Colour:	White
Odour:	Slightly
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	>100 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	1,05 g/ml (20°C)
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Mixable
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	130 mm2/s (40°C)
Explosive properties:	Product is not explosive.
Oxidising properties:	No
9.2 Other information	
Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined

#### **SECTION 10: Stability and reactivity**

Not determined

#### **10.1 Reactivity**

Solvents content:

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** None known **10.5 Incompatible materials** Avoid contact with strong oxidizing agents. **10.6 Hazardous decomposition products** No decomposition when used as directed.



Page 8 of 14

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

## **SECTION 11: Toxicological information**

## **11.1 Information on toxicological effects**

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

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Ethanediol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1600	mg/kg	Human being		
Acute toxicity, by dermal route:	LD50	9530	mg/kg	Rabbit		
Acute toxicity, by dermal route:	LD50	>3500	mg/kg	Mouse		
Skin corrosion/irritation:				Rabbit		Slightly irritant
Serious eye damage/irritation:				Rabbit		Slightly irritant
Respiratory or skin				Human being	(Patch-Test)	Negative
sensitisation:						
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	
Germ cell mutagenicity:				Rat	in vivo	Negative
Reproductive toxicity:	NOAEL	1000	mg/kg bw/d	Rat		
Symptoms:						ataxia, breathing difficulties, unconsciousness , cramps, fatigue

Sodium nitrite							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	180	mg/kg	Rat			
Acute toxicity, by inhalation:	LC50	5,5	mg/l/4h	Rat		Aerosol	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant	
					Dermal		
					Irritation/Corrosion)		
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Slightly irritant,	
					Irritation/Corrosion)	Eye Irrit. 2	



œ Page 9 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

Symptoms:			breathing
			difficulties,
			abdominal pain,
			unconsciousness
			, drop in blood
			pressure,
			annoyance,
			disturbed heart
			rhythm, collapse,
			headaches,
			mucous
			membrane
			irritation,
			dizziness,
			nausea and
			vomiting.

Reaction mass of 5-chloro-2-m	Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	64-66	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Acute Tox. 3		
Acute toxicity, by dermal route:	LD50	87,12	mg/kg	Rabbit		Acute Tox. 2		
Acute toxicity, by inhalation:	LC50	0,33	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol, Dust, Acute Tox. 2		
Acute toxicity, by inhalation:	LC50	0,81	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours, Acute Tox. 2		
Skin corrosion/irritation:				Rabbit		Skin Corr. 1C		
Serious eye damage/irritation:				Rabbit		Eye Dam. 1		
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1A		
Symptoms:						diarrhoea,		
						mucous		
						membrane		
						irritation,		
						watering eyes		

## **SECTION 12: Ecological information**

xicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
2.1. Toxicity to fish:	•						n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.
Ethanediol							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes



Bage 10 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

Toxicity to bacteria:	EC20	30min	>1995	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and	
						Ammonium Oxidation))	
Other information:	BOD5		0,78	g/g		Oxidation))	IUCLID
12.1. Toxicity to fish:	LC50	96h	>10000	mg/l	Pimephales promelas	IUCLID Chem. Data Sheet (ESIS)	ICCLID
12.1. Toxicity to fish:	NOEC/NOEL	7d	15380	mg/l	Pimephales promelas	U.S. EPA ECOTOX Database	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL		8590	mg/l	Daphnia magna	U.S. EPA ECOTOX Database	
12.1. Toxicity to algae:	EC50	96h	6500- 7500	mg/l	Pseudokirchneriell a subcapitata		
12.2. Persistence and degradability:		28d	56	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	
12.2. Persistence and degradability:		10h	90-100	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-1,36			,	Not to be expected
Toxicity to bacteria:	EC50	16h	>10000	mg/l	Pseudomonas putida	IUCLID Chem. Data Sheet (ESIS)	

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	0,54- 26,3	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	15,4	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to bacteria:	EC10	3h	210	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

 Toxicity / effect
 Endpoint
 Time
 Value
 Unit
 Organism
 Test method
 Notes



Page 11 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

12.2. Persistence and degradability:			>60	%	activated sludge	OECD 301 D (Ready Biodegradability -	Does not conform with EU classification.
12.1. Toxicity to algae:	EC50	48h	0,0052	mg/l	Skeletonema costatum	Closed Bottle Test) ISO 10253	
12.1. Toxicity to algae:	NOEC/NOEL	48h	0,00064	mg/l	Skeletonema costatum	ISO 10253	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,0012	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to bacteria:	EC50	3h	7,92	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

## For the substance / mixture / residual amounts

EC disposal code no.:

œ

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)

07 07 01 aqueous washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

# 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:	n.a.	
Transport by road/by rail (ADR/RID)		
14.2. UN proper shipping name:		
14.3. Transport hazard class(es):	n.a.	
14.4. Packing group:	n.a.	
Classification code:	n.a.	
LQ:	n.a.	
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:		
Transport by sea (IMDG-code)		
14.2. UN proper shipping name:		
14.3. Transport hazard class(es):	n.a.	
14.4. Packing group:	n.a.	
Marine Pollutant:	n.a	
14.5. Environmental hazards:	Not applicable	
Transport by air (IATA)		
14.2. UN proper shipping name:		



Page 12 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

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

14.5. Environmental hazards:

അ

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Non-dangerous material according to Transport Regulations.

## **SECTION 15: Regulatory information**

n.a.

n.a.

Not applicable

## 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

Disodium tetraborate pentahydrate

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

0,022065 %

Treated goods as per Regulation (EU) No. 528/2012 must display specific information on the label. Please note Article 58 paragraph (3) subparagraph 2 of Regulation (EU) No. 528/2012. Approval of the biocidal active substance may mean that special conditions are required for marketing the treated goods. These are indicated in the approval of the active substance.

## 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## **SECTION 16: Other information**

Revised sections:

2, 9, 15

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

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

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
STOT RE 2, H373	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).

H330 Fatal if inhaled.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H272 May intensify fire, oxidiser.

H360FD May damage fertility. May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

H317 May cause an allergic skin reaction.

H301 Toxic if swallowed.

H302 Harmful if swallowed. H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

STOT  $\mathsf{RE}-\mathsf{Specific}$  target organ toxicity - repeated exposure



Page 13 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

(GB)·

Acute Tox. — Acute toxicity - oral Repr. — Reproductive toxicity Ox. Sol. — Oxidising solid Eye Irrit. — Eye irritation Aquatic Acute — Hazardous to the aquatic environment - acute Acute Tox. — Acute toxicity - dermal Skin Corr. — Skin corrosion Skin Sens. — Skin sensitization Eye Dam. — Serious eye damage Acute Tox. — Acute toxicity - inhalation Aquatic Chronic — Hazardous to the aquatic environment - chronic

## Any abbreviations and acronyms used in this document:

International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately	ng the
Art., Art. no. Article number	
ASTM ASTM International (American Society for Testing and Materials)	
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)	
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)	
BSEF The International Bromine Council	
bw body weight	
CAS Chemical Abstracts Service	
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substan	nces
and mixtures)	
CMR carcinogenic, mutagenic, reproductive toxic	
DMEL Derived Minimum Effect Level	
DNEL Derived No Effect Level	
dw dry weight	
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance	
EC European Community	
ECHA European Chemicals Agency	
EEC European Economic Community	
EINECS European Inventory of Existing Commercial Chemical Substances	
ELINCS European List of Notified Chemical Substances	
EN European Norms	
EPA United States Environmental Protection Agency (United States of America)	
etc. et cetera	
EU European Union	
EVAL Ethylene-vinyl alcohol copolymer	
Fax. Fax number	
gen. general	
GHS Globally Harmonized System of Classification and Labelling of Chemicals	
GWP Global warming potential	
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	
MARPOL International Convention for the Prevention of Marine Pollution from Ships n.a. not applicable	
n.av. not available	
n.c. not checked	
n.d.a. no data available	
OECD Organisation for Economic Co-operation and Development	
org. organic	
PBT persistent, bioaccumulative and toxic	



Page 14 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.07.2019 / 0019 Replacing version dated / version: 08.04.2019 / 0018 Valid from: 22.07.2019 PDF print date: 22.07.2019 KUEHLER DICHTER 150 mL Art.: 3330

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) 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 Telephone Tel. UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative

wwt wet weight

ആ

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by: Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.