Completed	16-11-2022
Revision: (date)	09-03-2023
SDS version	1.1

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

1.1. Product Identifier	
Trade Name:	Boracol 10-3Bd
Product- no.:	-
UFI:	C7SX-V8TW-R00X-32SC

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

Biocide PT 08. Concentrated disinfectant for woodwork etc. For professionals only.

# Uses advised against:

This product must not be used for purposes other than those recommended without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet Company and address: KRS ApS Mandal Allé 9 A 5500 Middelfart Tlf.: +45 75 82 50 33

#### Contact person and E-mail: krsis@krsis.dk

The Safety data sheet is completed and validated by: Mediator A/S, Centervej 2, DK-6000 Kolding. Consultant: KN

## 1.4. Emergency telephone number

NHS: 111 Use your national or local emergency number - See section 4 "First aid measures".

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

CLP (1272/2008): Skin Irrit. 2;H315 Eye Irrit. 2;H319 Repr. 1B;H360FD Aquatic Chronic 3;H412

See full text of H-phrases in section 16.

2.2. Label elements



Signal word: Danger

Causes skin irritation. (H315) Causes serious eye irritation. (H319) May damage fertility. May damage the unborn child. (H360FD) Harmful to aquatic life with long lasting effects. (H412)

If medical advice is needed, have product container or label at hand. (P101) Keep out of reach of children. (P102) Indtast fritekst Avoid release to the environment. (P273) Wear protective gloves/ eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338) If skin irritation occurs: Get medical advice/attention. (P332 + P313) If eye irritation persists: Get medical advice/attention. (P337 + P313) Dispose of contents/container in accordance with local regulation. (P501)

# 2.3. Other hazards

The product contains a substance which is a suspected reproductive hazard.

# Additional labelling:

Contains: Activesubstance (PT8) 57,18 g/l Boric acid (5,43 % w/w), 20 °C. 25,8 g/l DDAC (2,45 % w/w), 20 °C.

#### Additional warnings

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

# 3.1./3.2. Substances/Mixtures

Substance	EU-Index no. / REACH-Reg. no.	CAS-no.	EINECS-no.	CLP-classification	Wt/Wt %	Note
Propane-1,2-diol	- / 01-2119456809- 23-xxxx	57-55-6	200-338-0	-	5-15	1
Boric acid	005-007-00-2 / -	10043-35-3	233-139-2	Repr. 1B;H360FD	5,43	2
Didecyldimethylammo nium chloride	612-131-00-6 / -	7173-51-5	230-525-2	Acute Tox. 3;H301, Skin Corr. 1B;H314, Aquatic Acute 1;H400, M=1, Aquatic Chronic 1;H410, M=1	2,45	-
Isotridecanol, ethoxylated	-/-	69011-36-5	500-241-6	Aquatic Acute 1;H400, M=1, Aquatic Chronic 3;H412	<1	-
Sodium hydroxide	011-002-00-6 / -	1310-73-2	215-185-5	Skin Corr.1A;H314	<1	3

1) The substance has a national exposure limit.

2) The substance is on the candidate list.

3) Specific concentration limits.

See full text of H-phrases in section 16.

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

## *Inhalation:* Seek fresh air. Keep victim under observation.

Seek medical advice in case of discomfort.

# Ingestion:

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Call a POISON CENTER or doctor/physician.

# Skin contact:

Remove contaminated clothing. Wash skin with soap and water. Call a POISON CENTER or doctor/physician.

#### Eye contact:

Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice.

#### Additional information:

When obtaining medical advice, show the safety data sheet or label.

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

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders.

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

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

Show this safety data sheet to the doctor in attendance.

# SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Surrounding fire:

Extinguish with powder, foam, carbon dioxide or water mist. Do not use water stream, as it may spread the fire.

# 5.2. Special hazards arising from the substance or mixture

The product is not directly flammable. Avoid inhalation of vapour and fumes – seek fresh air. Hazardous fumes are formed in fire conditions.

# 5.3. Advice for firefighters

Send contaminated extinguishing water for destruction. If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

**SECTION 6: Accidental release measures** 

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

See section 8 for type of protective equipment. Avoid breathing and contact with skin and eyes.

## 6.2. Environmental precautions

Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains. Prevent spillage from entering drains and/or surface water.

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

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.

#### 6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

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

# 7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment.

Use the product under well-ventilated conditions.

Running water and eye wash equipment should be available.

# 7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Keep in tightly closed original packaging. Storage temperature: <40 °C

7.3. Specific end use(s)

See application section 1.

# SECTION 8: Exposure controls/personal protection

Substance	Long-term	Short-term	Note
	exposure limit	exposure limit	
	ppm / mg/m <sup>3</sup>	ppm / mg/m <sup>3</sup>	
Propane-1,2-diol	150 / 474	-/-	-
total vapour and	- / 10		
particulates			
Sodium hydroxide	- / -	-/2	-
DNEL/PNEC-values:			
DNEL Propane-1,2-diol			
	Workers		Consumers
Inhalation - Chronic Systemic	168 mg/m³		50 mg/m³
Inhalation - Chronic Local	10 mg/m³		10 mg/m³
DNEL Boric acid			
	Workers		Consumers
Inhalation - Chronic Systemic	8,3 mg/m <sup>3</sup>		4,15 mg/m <sup>3</sup>
Dermal - Chronic Systemic	392 mg/kg bw/day		196 mg/kg bw/day
Oral - Chronic Systemic	-		0,98 mg/kg bw/da
Oral - Acute Systemic	-		0,98 mg/kg bw/day
DNEL Isotridecanol, ethoxyleret			
	Workers		Consumers
Inhalation - Chronic Systemic	294 mg/m³		87 mg/m³
Dermal - Chronic Systemic	2080 mg/kg bw/day		1250 mg/kg bw/da
Oral - Chronic Systemic	-		25 mg/kg bw/day
Oral - Acute Systemic	-		25 mg/kg bw/day
PNEC Propane-1,2-diol			
Fresh water	260 mg/L		
Intermittent releases (Fresh water)	183 mg/L		
Marine water	26 mg/L		
Soil	50 mg/kg soil dw		
	So mg/kg Soir aw		
PNEC Boric acid			
Fresh water	2,9 mg/L		
Intermittent releases (Fresh water)	13,7 mg/L		
Marine water	2,9 mg/L		
Soil	5,7 mg/kg soil dw		
PNEC Didecyldimethylammonium ch	loride		
Fresh water	1,1 µg/L		
Intermittent releases (Fresh water)	0,21 μg/L		
Marine water	0,11 μg/L		
Intermittent releases (Marine water)	0,021 µg/L		
Soil	1,4 mg/kg soil dw		
PNEC Isotridecanol, ethoxyleret			
Fresh water	0,074 mg/L		
Intermittent releases (Fresh water)	0,015 mg/L		
Marine water	0,007 mg/L		
Soil	0,1 mg/kg soil dw		

Appropriate engineering controls: Wear the personal protective equipment specified below. Wash hands before breaks, before using restroom facilities, and at the end of work. Do not eat, drink or smoke when using this product.

## Personal protective equipment:



#### Respiratory protection: Generally not required.

## Hand protection:

Brug beskyttelseshandsker af XX (nitrilgummi, latex, neoprengummi, butylgummi). Change gloves immediately if contaminated, and wash hands with soap and water.

# Eye/face protection:

Wear safety goggles/face protection. When working with concentrate: Wear safety goggles/face protection.

## Skin protection:

Wear suitable protective clothing.

# Environmental exposure controls:

Ensure compliance with local regulations for emissions.

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

9.1. Information on basic physical and chemical properties	
Physical state:	Liquid
Colour:	-
Odour:	-
Melting point/ Freezing Point (°C):	-
Boiling point or initial boiling point and boiling range (°C):	-
Flammability:	-
Lower and upper explosion limit (vol-%):	-
Flash point (°C):	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
pH:	-
Kinematic viscosity (mm2/s):	-
Solubility:	-
Partition coefficient n-octanol/water (log value)	-
Vapour pressure:	-
Density and/or relative density:	1,053475 g/cm3
Relative vapour density:	-
Particle characteristics:	-
9.2. Other information	

# None.

**SECTION 10: Stability and reactivity** 

# 10.1. Reactivity

No data.

# 10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

# 10.3. Possibility of hazardous reactions

None known.

# 10.4. Conditions to avoid

None known.

# 10.5. Incompatible materials

Avoid contact with strong oxidising agents.

# 10.6. Hazardous decomposition products

Product decomposes in fire conditions or when heated to high temperatures, and toxic gases such as NOx, COx may be released.

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

# Acute toxicity:

Based on the existing data, the classification is not met.

Substance	exposure	Species	Test	Result
Propane-1,2-diol	Oral	Rat	LD50	22000 mg/kg bw
Propane-1,2-diol	Inhalation	Rat	LC50/ 4 Hours	-
Propane-1,2-diol	Dermal	Rabbit	LD50	> 2000 mg/kg bw
Boric acid	Oral	Rat	LD50	> 2600 mg/kg bw
Boric acid	Inhalation	Rat	LC50/ 4 Hours	> 2,03 mg/L air
Boric acid	Dermal	Rabbit	LD50	> 2000 mg/kg bw
Didecyldimethylammo nium chloride	Oral	Rat	LD50	329 mg/kg bw
Didecyldimethylammo nium chloride	Dermal	Rat	LD50	> 1000 mg/kg bw
Isotridecanol, ethoxylated	Oral	Rat	LD50	> 2000 mg/kg bw
Isotridecanol, ethoxylated	Inhalation	Rat	LC50/ 6 Hours	> 100 mg/m <sup>3</sup> air
Isotridecanol, ethoxylated	Dermal	Rabbit	LD50	ca. 5960 mg/kg bw

## Skin corrosion/irritation:

Irritating to skin - may cause reddening.

# Serious eye damage/irritation:

Irritating to eyes. Causes a burning sensation and tearing.

## Respiratory or skin sensitisation:

Based on the existing data, the classification is not met.

# Germ cell mutagenicity:

Based on the existing data, the classification is not met.

## Carcinogenicity:

Based on the existing data, the classification is not met.

# Reproductive toxicity:

May damage fertility or the unborn child.

# STOT-single exposure:

Based on the existing data, the classification is not met.

# STOT-repeated exposure:

Based on the existing data, the classification is not met.

## Aspiration hazard:

Based on the existing data, the classification is not met.

# 11.2. Information on other hazards

Test data are not available.

# **SECTION 12: Ecological information**

12.1. Toxicity				
Substance	Test duration	Species	Test	Result
Propane-1,2-diol	96 Hours	Fish	LC50	40613 mg/L
Propane-1,2-diol	96 Hours	Daphnia	LC50	18340 mg/L
Propane-1,2-diol	96 Hours	Algae	EC50	24200 mg/L
Didecyldimethylammo nium chloride	96 Hours	Fish	LC50	0,49 mg/L
Didecyldimethylammo nium chloride	48 Hours	Daphnia	EC50	0,029 mg/L
lsotridecanol, ethoxylated	48 Hours	Daphnia	LC50	1,5 mg/L
Sodium hydroxide	48 Hours	Daphnia	EC50	40,4mg/L

Pocult

# 12.2. Persistence and degradability

Substance	Бюйеўгайаршіту	Test	Result
Propane-1,2-diol	Yes	OECD Guideline 301 F	28 Days 81,7%
Didecyldimethylammo nium chloride	Yes	OECD Guideline 301 B	28 Days 71%
Isotridecanol, ethoxylated	Yes	OECD Guideline 301 B	28 Days 75%

Toot

# 12.3. Bioaccumulative potential

Substance	Potential	LogPow
	bioaccumulation	
Propane-1,2-diol	No	-1,07
Boric acid	No	-1,09
Didecyldimethylammo	No	-0,41
nium chloride		
Isotridecanol,	Yes	6,4
ethoxylated		

# 12.4. Mobility in soil

Test data are not available.

# 12.5. Results of PBT and vPvB assessment

The product does not meet the criteria for PBT or vPvB.

# 12.6. Endocrine disrupting properties

Test data are not available.

# 12.7. Other adverse effects

Harmful to aquatic life with long lasting effects.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC-Code	Description
03 02 05	Other wood preservatives containing hazardous substances

# Specific labelling:

# Contaminated packaging:

Empty packaging and residues must be disposed of through the municipal waste collection service for hazardous waste.

# **SECTION 14: Transport information**

The product is not covered by the rules for transport of dangerous goods by road and sea according to ADR, IMDG and IATA.

14.1 -14.4. ADR

# IMDG/IATA

14.5. Environmental hazards

# 14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments Not relevant.

# **SECTION 15: Regulatory information**

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

#### Sources:

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

# Additional labelling:

# Restrictions for application:

For professional users only.

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training. Special care should be applied for pregnant and lactating women.

# Demands for specific education:

# 15.2. Chemical safety assessment

None.

# **SECTION 16: Other information**

According to EU regulation 1907/2006 (REACH)

## Other information:

Sources: EC regulation 1907/2006 (REACH), with amendments. EC Regulation 1272/2008 (CLP), with amendments. EC Regulation 528/2012 (BPR), with amendments. EU regulation no. 276/2010 Directive 2008/98/EC ECHA - The European Chemicals Agency

# Full text of H-phrases as mentioned in section 2+3:

H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

## Classification according to Regulation (EC) Nr. 1272/2008:

Skin Irrit. 2;H315	Calculation method
Eye Irrit. 2;H319	Calculation method
Repr. 1B;H360FD	Calculation method
Aquatic Chronic 3;H412	Calculation method

# Abbreviations and acronyms used in the safety data sheet:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. Regulation (EC) No 1907/2006.

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

CAS-Number.: Chemical Abstracts Service number.

EC-Number.: EINECS and ELINCS Number (see also EINECS and ELINCS).

DNEL: Derived No Effect Level.

PNEC(s): Predicted No Effect Concentration(s).

STOT: Specific Target Organ Toxicity.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

EC50: The effective concentration of substance that causes 50% of the maximum response.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: Very Persistent and Very Bioaccumulative.

NOEC: The highest tested concentration at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.

NOAEL: The highest tested dose or exposure level at which there are no statistically significant increases in the frequency or severity of adverse effects between the exposed population and an appropriate control group; some effects may be produced at this level, but they are not considered adverse or precursors of adverse effects.

Other:

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

Minor changes have been made in following sections: General update.

*This material safety data sheet replaces version:* 1.0