

Material Safety Data Sheet

SDS date: 22-10-2019

SDS version: 1.3

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

1.1. Product Identifier

Trade Name: Boracol 20

Product- no.: -

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

Recommended uses: Biocide. Concentrated disinfectant for woodwork etc. Only for professional use.

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

DK-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: SJ

1.4. Emergency telephone number

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): Repr. 1B;H360FD.

See full text of H-phrases in section 16.

2.2. Label elements



Signal word:

Danger

May damage fertility. May damage the unborn child. (H360FD)

Obtain special instructions before use. (P201)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

IF exposed or concerned: Get medical advice/attention. (P308+P313)

Store locked up. (P405)

2.3. Other hazards

The product contains organic solvents. Repeated exposure to organic solvents may cause damage to the central nervous system and internal organs fx. liver and kidney.

Additional labelling:

-

Additional warnings:

-

SECTION 3: Composition/information on ingredients

3.1./3.2. Substances/Mixtures

Substance	EU-Index no.	Cas / EINECS no.	CLP-classification	w/w%	Note
Ethanediol	603-027-00-1	107-21-1/ 203-473-3	Acute Tox. 4;H302	>50	1
Disodium octaborate tetrahydrate	005-020-00-3	12280-03-4/ 234-541-0	Repr. 1B;H360FD	21	-

1 = The substance is an organic solvent.

For the wording of the listed risk phrases refer to 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. Seek medical advice immediately.
Skin contact:	Immediately remove contaminated clothing. Wash the skin thoroughly with water and continue washing for a long time. Seek medical advice immediately.
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. Symptoms: See section 11.

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

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Surrounding fire: Extinguish with powder, foam or carbon dioxide. 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.

6.2. Environmental precautions

Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

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. See section 13 for instructions on disposal.

6.4. Reference to other sections

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment. Smoking and naked flames prohibited. Running water and eye wash equipment should be available.

7.2. Conditions for safe storage, including any incompatibilities

Keep in tightly closed original packaging. Store in a dry area.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits according to EH40/2005 Workplace exposure limits (Second edition, 2011):

Substance	Long-term exposure limit	Short-term exposure limit	Note
Ethane-1,2-diol particulate	10 mg/m ³	-	Sk
vapour	20 ppm - 52 mg/m ³	40 ppm - 104 mg/m ³	

Sk = Can be absorbed through the skin.

DNEL and PNEC values:

DNEL - Ethane-1,2-diol:

Workers

Inhalation - Chronic Local 35 mg/m³
Dermal - Chronic Systemic 106 mg/kg bw/day

Consumers

Inhalation - Chronic Local 7 mg/m³
Dermal - Chronic Systemic 53 mg/kg bw/day

PNEC - Ethane-1,2-diol:

Fresh water 10 mg/L
Intermittent releases (Fresh water) 10 mg/L
Marine water 1 mg/L
Intermittent releases (Havvand) 10 mg/L
Soil 1,53 mg/kg soil dw

8.2. Exposure controls

There are no exposure scenarios for this product.

Appropriate engineering controls:

Wash hands before breaks, before using restroom facilities, and at the end of the work. Wear the personal protective equipment specified below.

Personal protective equipment:



Breathing equipment:	In case of insufficient ventilation, wear respiratory protective equipment with filter A2/P2 (EN 136/140/145).
Hand protection:	Wear protective gloves made of natural rubber (EN 374). Change gloves immediately if contaminated, and wash hands with soap and water.
Eye protection:	Wear safety goggles/face protection (EN 166).
Body and 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

Appearance:	Liquid. Yellowish
Odour:	Weak, sweet
Odour threshold:	-
pH:	5,6 (1 % l water)
Melting point/ Freezing Point (°C):	-
Initial boiling point and boiling range (°C):	113
Flash point (°C):	<150
Evaporation rate:	-
Flammability (solid, gas)	-
Upper / lower flammability or explosion limits (vol-%):	-
Vapour pressure (mbar, 25 °C):	-
Vapour density (air=1)	-
Relative density (g/cm ³):	1,21068
Solubility(ies)	Soluble with water
Partition coefficient: n-octanol/water:	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
Viscosity (mPa s, 20 °C):	18,3 (ASTM D 445)
Explosive properties:	-
Oxidising properties:	-

9.2. Other information

Content of solids (%):	-
Surface tension (mN/m, 25 °C):	-

SECTION 10: Stability and reactivity

10.1. Reactivity

Non-reactive.

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 CO_x may be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Ingestion may cause discomfort.

Substance	Route of exposure	Species	Test	Result
Ethane-1,2-diol	Oral	Rat	LD50	7712 mg/kg bw
Ethane-1,2-diol	Inhalation	Rat	LC50 / 6 Hours	> 2,5 mg/L air
Ethane-1,2-diol	Dermal	Mouse	LD50	> 3500 mg/kg bw
Disodium octaborate tetrahydrate	Oral	Rat	LD50	2500 - 4080 mg/kg bw
Disodium octaborate tetrahydrate	Inhalation	Rabbit	LC50 / 4 hours	2000 mg/kg bw
Disodium octaborate tetrahydrate	Dermal	Rat	LD50	2.01 - 2.12 mg/L air

Skin corrosion/irritation: Irritating to skin – may cause reddening.

Serious eye damage/irritation: May cause eye irritation.

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: The product contains Dinatrium tetraborate tetrahydrate, which is a suspected reproductive hazard.

STOT-single exposure: The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

STOT-repeated exposure: Prolonged or repeated exposure by skin contact or inhalation of vapours may cause damage to the central nervous system.

Aspiration hazard: Based on the existing data, the classification is not met.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
Ethane-1,2-diol	96 hours	Fish	LC50	>72860 mg/L
Ethane-1,2-diol	48 hours	Daphnia	EC50	> 100 mg/L
Disodium octaborate tetrahydrate	96 hours	Fish	LC50	74 - 79.7 mg/L
Disodium octaborate tetrahydrate	48 hours	Dafnia	LC50	91 - 165 mg/L
Disodium octaborate tetrahydrate	72 hours	Algae	EC50	40.2 - 66 mg/L

According to EU regulation 1907/2006 (REACH)

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Ethane-1,2-diol	Yes	OECD Guideline 301 A	10 days: 90-100%

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Ethane-1,2-diol	No	-1,36	-

12.4. Mobility in soil

-

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact the local authorities.

EWC Code

03 02 04

15 02 02

Specific labelling

-

Contaminated packaging:

Uncleansed packaging is to be disposed of via the local waste-removal scheme.

SECTION 14: Transport information

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

14.1 -14.4.

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14.5. Environmental hazards

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14.6. Special precautions for user

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

SECTION 15: Regulatory information

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

Subject to REGULATION (EU) No 528/2012 (BPR).

Restrictions for application:

The product should only be used as a product group 8 - Impregnating agent for wood.

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.

According to EU regulation 1907/2006 (REACH)

Demands for specific education:

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Additional labelling:

Subject to REGULATION (EU) No 528/2012 (BPR).

Contains: disodium octaborate tetrahydrate 256,2 g/l (21,00%w/w).

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: Other information

Other information:

Sources:

EC regulation 1907/2006 (REACH).

Directive 2000/532/EC.

EC Regulation 1272/2008 (CLP).

EH40/2005 Workplace exposure limits (Third edition, 2018).

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

H302 - Harmful if swallowed.

H360FD - May damage fertility. May damage the unborn child.

Classification according to Regulation (EC) Nr. 1272/2008:	
Repr. 1B;H360FD.	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.

Other

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Minor changes have been made in following sections:

1 – 16.

This material safety data sheet replaces version:

1.2 (02-05-2018).
