

Material Safety Data Sheet

SDS date: 05-07-2017

SDS version: 1.1

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.

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: DH

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
Dinatrium tetraborate tetrahydrate	005-020-00-3	12008-41-2/ 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 vapour	10 mg/m ³ 20 ppm - 52 mg/m ³	- 40 ppm - 104 mg/m ³	Sk

Sk = Can be absorbed through the skin.

DNEL and PNEC values:

DNEL - Ethanediol:

Dermal	Long Term	Systemic effects	Workers	106 mg/kg bw/day
Inhalation	Long Term	Local effects	Workers	35 mg/m ³
Dermal	Long Term	Systemic effects	General population	53 mg/kg bw/day
Inhalation	Long Term	Local effects	General population	7 mg/m ³

DNEL - Dinatrium tetraborate tetrahydrate:

Dermal	Long Term	Systemic effects	Workers	326 mg/kg bw/day
Inhalation	Long Term	Systemic effects	Workers	6.9 mg/m ³
Oral	Short term	Systemic effects	General population	810 µg/kg bw/day
Oral	Long Term	Systemic effects	General population	810 µg/kg bw/day
Dermal	Long Term	Systemic effects	General population	163.3 mg/kg bw/day
Inhalation	Long Term	Systemic effects	General population	3.5 mg/m ³

PNEC - Ethanediol:

Water	Fresh	10 mg/L
Water	Marine	1 mg/L
Water	Intermittent releases	10 mg/L
Soil	-	1.53 mg/kg soil dw

PNEC - Dinatrium tetraborate tetrahydrate:

Water	Fresh	2.9 mg/L
Water	Marine	2.9 mg/L
Water	Intermittent releases	13.7 mg/L
Soil	-	5.7 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

Substance	Route of exposure	Species	Test	Result
Ethane-1,2-diol	Oral	rat	LD50	7712 mg/kg bw
Ethane-1,2-diol	Dermal	mouse	LD50	> 3500 mg/kg bw
Ethane-1,2-diol	Inhalation	rat	LC50 / 6h	> 2.5 mg/L air
Dinatrium tetraborate tetrahydrate	Oral	Rat	LD50	2500 - 4080 mg/kg bw
Dinatrium tetraborate tetrahydrate	Inhalation	Rat	LC50 / 4 h	2.01 - 2.12 mg/L air
Dinatrium tetraborate tetrahydrate	Dermal	Rabbit	LD50	2000 mg/kg bw

Symptoms:

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

Ingestion: Ingestion may cause discomfort.

Skin contact: May irritate the skin – may cause reddening. Can be absorbed through the skin with the same symptoms as for ingestion.

Eye contact: May cause eye irritation.

Long term effects:

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

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

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
Ethane-1,2-diol	96 h	Fish	LC50	72860 mg/L
Ethane-1,2-diol	48 h	Daphnia	EC50	> 100 mg/L
Ethane-1,2-diol	96 h	Algae	EC50	6500 - 13000 mg/L
Dinatrium tetraborate tetrahydrate	96 h	Fish	LC50	74 - 79.7 mg/L
Dinatrium tetraborate tetrahydrate	48 h	Dafnia	LC50	91 - 165 mg/L
Dinatrium tetraborate tetrahydrate	72 h	Algae	EC50	40.2 - 66 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data	-	-	-

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

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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

-

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: dinatrium tetraborate 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).

EC Regulation 178/2002.

EH40/2005 WELs (United Kingdom (UK), 8/2007).

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

H302 - Harmful if swallowed.

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

Other

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Minor changes have been made in following sections:

1-16.

This material safety data sheet replaces version:

1.0 (25-01-2017).
