

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

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

1.1 Product identifier:

Bro-Cure RTU

UFI: XXXX-XXXX-XXXX-XXXX

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

Concrete surface treatment.

1.3 Details of the supplier of the safety data sheet:

HauCon A/S

Lægårdsvej 30 T: +45 – 8622 9393

DK-8520 Lystrup

Denmark

Responsible person for the safety data sheet (e-mail): sds@haucon.dk

1.4 Emergency telephone number:

DK: + 45 82 12 12 12 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Irritant liquid.

CLP (1272/2008): Skin Irrit 2;H315 Eye Irrit. 2;H319

2.2 Label elements:



WARNING

H315: Causes skin irritation.

H319: Causes serious eye irritation.

P280: Wear protective gloves/ eye protection.

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

2.3 Other hazards: None known.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

Endocrine disrupting properties: The substances are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2017/2100 or Regulation 2018/605.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

| % w/w | Substance | CAS-no. | EF-no. | Index-no. | REACH reg.no. | Classification |
|--------|--|---------|--------|-----------|---------------|-------------------------|
| 20-<30 | Silicate, inorganic ¹ | - | - | - | * | Acute Tox. 4;H302 |
| | SiO ₂ ·M ₂ O > 2,6 | | | | | Skin Irrit. 2;H315 |
| | | | | | | Eye Irrit. 2;H319 |
| | | | | | | ATE (oral) = 1153 mg/kg |

* Has been REACH registered

¹ The substance classification is based on CEESs recommendation (www.cees-silicates.org/). According to CEES test results, liquid mixtures of silicates with (MRI)>2.6 and solid content <40%

Wording of hazard statements - see section 16

SECTION 4: First-aid measures

4.1 Description of first aid measures:

Inhalation: Remove to fresh air. Keep at rest. In case of discomfort: Seek medical advice.

Skin contact: Remove contaminated clothing. Flush and wash skin with water. If any skin irritation: Seek medical advice.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Seek medical attention; continue to flush on the way.

Ingestion: Rinse mouth and drink plenty of water. Do not induce vomiting. In case of discomfort: Seek medical advice.

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

Irritation of skin and eyes.

4.3 Indication of any immediate medical attention and special treatment needed:

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Not flammable.

5.2 Special hazards arising from the substance or mixture:

Not relevant (the product is not combustible).

5.3 Advice for firefighters:

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use gloves of rubber when spill is wiped up – see section 8. Provide efficient ventilation. Avoid further spreading.

6.2 Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Flush area of spill with plenty of water.

Further handling of spillage - see section 13.

6.4 Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Wash contaminated skin with water and mild soap. Required access to water and eye wash fountain. Avoid breathing vapours/particles.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-closed original container at temperatures between 5-30°C.

Store securely and out of reach of unauthorized personnel and separated from food, feed, drugs etc.

7.3 Specific end use(s):

See section 1.

SECTION 8: Exposure controls/personal protection

| 8.1. Control parameters: | | Substance name | 8-hour TWA | Note |
|------------------------------------|------------------------------|------------------------|------------|----------|
| Occupational exposure limits (DK): | | None | | |
| DNEL: | Exposure | Value | Population | Effect |
| Sodium silicate | Long-term-inhalation | 5.61 mg/m ³ | Workers | Systemic |
| | Long-term-skin | 1.59 mg/kg/d | Workers | Systemic |
| | Long-term-inhalation | 1.38 mg/m ³ | Consumer | Systemic |
| | Long-term-skin | 0.8 mg/kg/d | Consumer | Systemic |
| | Long-term-ingestion | 0.8 mg/kg/d | Consumer | Systemic |
| PNEC: | Exposure | Value | | |
| Sodium silicate | Fresh water | 7.5 mg/l | | |
| | Marine water | 1 mg/l | | |
| | Sewage treatment plant (STP) | 348 mg/l | | |

SECTION 8: Exposure controls/personal protection (continued)

8.2. Exposure controls:

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: By inadequate ventilation or spraying: Use an approved mask (EN 149) with a particle filter: Type P2. The filters have a limited lifetime and must be changed. Read the instructions.

Skin: Wear protective gloves (EN374-3) of e.g. nitrile. Breakthrough time: Not known – change gloves frequently.

Eyes: Tightly fitting safety goggles (EN 166) when there is risk of eye contact.

Environmental exposure controls: None in particular.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

| | |
|--|--------------------|
| Physical state: | Liquid |
| Colour: | Pink |
| Odour: | Weak |
| Melting point/freezing point (°C): | Not determined |
| Boiling point or initial boiling point and boiling range (°C): | 100 |
| Flammability (solid, gas): | Not relevant |
| Lower and upper explosion limit (vol-%): | Not determined |
| Flash point (°C): | > 100 |
| Auto-ignition temperature (°C): | Not relevant |
| Decomposition temperature (°C): | Not determined |
| pH: | < 11.5 (MRI < 2.6) |
| Kinematic viscosity: | Not determined |
| Solubility: | Soluble in water |
| Partition coefficient n-octanol/water (log value): | Not determined |
| Vapour pressure: | Not determined |
| Density and/or relative density /kg/cm ³): | 1.080 |
| Relative vapour density: | Not determined |
| Particle characteristics: | Not determined |

9.2. Other information:

None relevant.

SECTION 10: Stability and reactivity

10.1 Reactivity:

Reacts in contact with acids (forms a gel).

10.2 Chemical stability:

Stable under normal conditions – see section 7. Not combustible.

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

Avoid freezing and excessive heating.

10.5 Incompatible materials:

Acids, stannate, zinc and aluminium.

10.6 Hazardous decomposition products:

In case of extensive heating, the mixture may form hazardous decomposition product.

SECTION 11: Toxicological information

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

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

Skin corrosion/irritation: Skin irritant – Skin Irrit. 2;H315

Serious eye damage/irritation: Eye irritant – Eye Irrit. 2;H319

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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.

SECTION 11: Toxicological information

| Hazard class | Data | Test | Data source |
|-----------------------|--|----------------|-------------|
| Acute toxicity: | | | |
| Inhalation | LC ₅₀ (rat) > 2.06 mg/m ³ (Sodium silicate) | No information | Supplier |
| Dermal | LD ₅₀ (rat) > 50000 mg/kg (Sodium silicate) | No information | Supplier |
| Oral | LD ₅₀ (rat) = 5150 mg/kg (Sodium silicate) | No information | Supplier |
| | LD ₅₀ (rat) = 1153 mg/kg (Silicate, SiO ₂ ·M ₂ O > 2.6) | No information | Supplier |
| Corrosion/irritation: | Skin irritation, rabbit (Sodium silicate) | OECD 404 | ECHA |
| | Eye irritation, rabbit (Sodium silicate) | OECD 405 | ECHA |
| Sensitization: | No skin sensitization (Sodium silicate) | No information | Supplier |
| CMR: | No CMR-effects (Sodium silicate) | No information | Supplier |

Information on likely routes of exposure: Inhalation, skin and ingestion.

Symptoms:

Inhalation: Mist/particles may irritate the respiratory tract.

Skin: Cause irritation in contact with skin. Degreases skin.

Eyes: Causes irritation with redness.

Ingestion: Cause irritation of the gastrointestinal tract, nausea, vomiting and headache.

Chronic effects: None known.

11.2. Information on other hazards:

None known.

SECTION 12: Ecological information

12.1 Toxicity:

| Akvatisk | Data | Test (Media) | Reference |
|------------|---|---------------|-----------|
| Fish | LC ₅₀ (Brachydanio rerio, 96h) = 1108 mg/l (Sodium silicate) | OECD 203 (FW) | ECHA |
| Crustacean | EC ₅₀ (Daphnia magna, 48h) = 1700 mg/l (Sodium silicate) | OECD 202 (FW) | ECHA |
| Algae | EC ₅₀ (Scenedesmus sub. 72h, biomass) = 207 mg/l (Sodium silicate) | OECD 201 (FW) | ECHA |

12.2 Persistence and degradability:

Methods to determine the biological degradability does not apply for inorganic substances. In an aqueous solution with pH<9, the inorganic silicium polymers in the product will mineralise and precipitate. The maximum concentration of soluble organic silicium polymer at this pH is 120 mg/l.

12.3 Bioaccumulative potential:

Sodium silicate: No significant bioaccumulative potential. Inorganic silicium polymers are nutrients to algae and aquatic plants without retention.

12.4 Mobility in soil:

No available or applicable data.

12.5 Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

12.6. Endocrine disrupting properties:

None known.

12.7. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Occupational: The mixture is to be considered as hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

11 01 99 (mixture itself) and 15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

Not dangerous goods (ADR/RID/IMDG/IATA).

14.1. UN number or ID number: None.

14.2. UN proper shipping name: None.

14.3. Transport hazard class(es): None.

14.4. Packing group: None.

14.5. Environmental hazards: No.

14.6. Special precautions for user: None.

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:

Danish 1993-code number: 00-3

Danish PR-number: 4124730

15.2. Chemical Safety Assessment:

No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.

IUCLID = International Uniform Chemical Information Database.

RTECS = Register of Toxic Effects of Chemical Substances.

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

Not relevant.

Prepared by: Altos a/s – Tonsbakken 16-18 – DK-2740 Skovlunde - Phone +45 - 38 34 77 98 / PW - Quality control: PH