SAFETY DATA SHEET

BarrierTech Sanitiser

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	01.06.2020

1.1. Product identifier

Product name	BarrierTech Sanitiser

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

Product group	Biocide. Product-type 2.
Use of the substance / preparation	Surface disinfection.

1.3. Details of the supplier of the safety data sheet

Company name	Fiber ProTector Norge AS
Postal address	Grini Næringspark 1
Postcode	1361
City	ØSTERÅS
Country	Norway
Telephone number	+47 23 23 15 55
Email	espen@fiberprotector.com
Website	www.fiberprotector.no
Enterprise No.	996 607 593

1.4. Emergency telephone number

Emergency telephone	Telephone number: National Poisons Information Service (NPIS): 0344 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP classification, comments	Classification according to (EU) No. 1272/2008 (CLP): Not classified.

2.2. Label elements

Other label information (CLP)	No labelling acquired according to (EU) no 1272/2008 (CLP).

2.3. Other hazards

PBT / vPvB	This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Didecyldimethylammonium chloride	CAS No.: 7173-51-5 EC No.: 230-525-2 REACH Reg. No.: 01-2119945987-15	Acute Tox. 3; H301 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400; M-factor 10 Aquatic Chronic 2; H411	0,075 %	
Alkyl (C12-16) dimethylbenzyl ammonium chloride	CAS No.: 68424-85-1 EC No.: 270-325-2 REACH Reg. No.: 01-2119965180-41	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400; M-factor 10 Aquatic Chronic 1; H410	0,05 %	
Substance comments	Full text of H-statements: see section 16.			

SECTION 4: First aid measures

4.1. Description of first aid measures

General	In case of doubt or persistent symptoms, consult always a physician. Emergency telephone number, see section 1.4. If medical advice is needed, have product container or label at hand.
Inhalation	Remove person to fresh air and keep comfortable for breathing.
Skin contact	Normally not necessary. Rinse skin with water/shower. Seek medical attention if irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Give water to drink. Do not give an unconscious person anything to drink. Do not induce vomiting. Get medical advice/attention.

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

Acute symptoms and effects	IF INHALED: Vapor/mist can be slightly irritating. IF ON SKIN: Repeated or prolonged skin contact may cause slight irritation. IF IN EYES: May cause slight irritation. Redness, pain, tears.

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

Other information	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Foam, powder, water spray/mist, carbon dioxide.
Improper extinguishing media	Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Not combustible.
Hazardous combustion products	May include, but not limited to: Carbon oxides (CO, CO2). Unspecified organic compounds. Nitrogen oxides (NOx). Halogenated compounds. Hydrogen chloride.

5.3. Advice for firefighters

Personal protective equipment	Wear a self-contained breathing apparatus (SCBA) and appropriate personal protective equipment (PPE).
Other information	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Ventilate spillage area. Avoid eye contact. Avoid prolonged contact with skin. Use personal protective equipment as required. Refer to section 8.

6.2. Environmental precautions

Environmental precautionary measures	Prevent spillage to sewer, waterway or ground.

6.3. Methods and material for containment and cleaning up

Clean up	Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite. Shovel into suitable and closed container for disposal.
Other information	Non hazardous waste. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Other instructions	For further information refer to section 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Ensure good ventilation of the work station. Avoid contact with eyes. Wear personal protective equipment. Refer to section 8.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a dry place. Keep cool. Keep only in original container. Keep container tightly closed.

7.3. Specific end use(s)

Specific use(s)	See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Control parameters comments	References: EH40/2005 Workplace exposure limits.

DNEL / PNEC

Substance	Didecyldimethylammonium chloride
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 18,2 mg/m³ **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 8,6 mg/kg bw/day
PNEC	**Route of exposure:** Freshwater **Value:** 0,002 mg/l **Route of exposure:** Saltwater **Value:** 0,0002 mg/l **Route of exposure:** Sewage treatment plant STP **Value:** 0,595 mg/l **Route of exposure:** Freshwater sediments **Value:** 2,82 mg/kg dw **Route of exposure:** Saltwater sediments **Value:** 0,282 mg/kg dw **Route of exposure:** Soil **Value:** 1,4 mg/kg dw **Value:** 0,00029 mg/l **Comments:** Intermittent release
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 3,96 mg/m³ **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 5,7 mg/kg bw/day **Group:** Consumer **Route of exposure:** Long-term inhalation (systemic)

	Value: 1,64 mg/m³ **Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 3,4 mg/kg bw/day **Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 3,4 mg/kg bw/day
PNEC	**Route of exposure:** Freshwater **Value:** 0,0009 mg/l **Route of exposure:** Saltwater **Value:** 0,00096 mg/l **Route of exposure:** Sewage treatment plant STP **Value:** 0,4 mg/l **Route of exposure:** Freshwater sediments **Value:** 12,27 mg/kg dw **Route of exposure:** Saltwater sediments **Value:** 13,09 mg/kg dw **Route of exposure:** Soil **Value:** 7 mg/kg dw

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	Ensure good ventilation of the work station. Personal protective equipment must be CE marked and should be selected in collaboration with the supplier of such equipment. The recommended protective equipment and the specified standards are indicative. Standards should be of the latest version. Risk assessment of the actual workplace / operation (actual risk) may result in other protective measures.

Eye / face protection

Suitable eye protection	If risk of exposure: Protective goggles. EN 166.
Additional eye protection measures	Possibility of eye rinsing should be found in the workplace.

Hand protection

Suitable gloves type	If repeated or prolonged exposure: Nitrile or neoprene gloves. EN 374. Breakthrough time: No information available Glove thickness: No information available.

Skin protection

Suitable protective clothing	Normal work clothes.

Respiratory protection

Respiratory protection, general	Normally not necessary.
Respiratory protection necessary at	If risk of exceeding the occupational exposure limit: Respiratory protection with filter AX-BEK/P2. EN 14387.

Appropriate environmental exposure control

Environmental exposure controls	Prevent spillage to sewer, waterway or ground.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Colourless
Odour	Characteristic
Odour limit	Comments: Not determined.
pH	Value: ~ 7
Melting point / melting range	Value: ~ 0 °C
Boiling point / boiling range	Value: ~ 100 °C
Flash point	Comments: Not relevant.
Evaporation rate	Comments: Ikke bestemt.
Flammability (solid, gas)	Ikke relevant.
Explosion limit	Comments: Not relevant.
Vapour pressure	Comments: Not determined.
Vapour density	Comments: Not determined.
Relative density	Comments: Not determined.
Density	Value: ~ 1000 kg/m³
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/ water	Comments: No data available.
Spontaneous combustability	Comments: Not self-igniting.
Decomposition temperature	Comments: Ingen data tilgjengelig.
Viscosity	Value: 1 mPa.s Temperature: 20 °C
Explosive properties	Not explosive.
Oxidising properties	Not classified as oxidizing.

9.2. Other information

Other physical and chemical properties

Comments	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stability	Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known.

10.4. Conditions to avoid

Conditions to avoid	None known.

10.5. Incompatible materials

Materials to avoid	None known.

10.6. Hazardous decomposition products

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Didecyldimethylammonium chloride
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Value:** 238 mg/kg **Animal test species:** Rat
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Method:** OECD 401 **Value:** > 300 - 2000 mg/kg **Animal test species:** Rat

Other information regarding health hazards

Assessment of acute toxicity, classification	Not classified. (Based on available data, the classification criteria are not met.)
Substance	Didecyldimethylammonium chloride
Skin corrosion / irritation test result	**Method:** OECD 404 **Species:** Rabbit **Evaluation result:** Causes burns.

Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Skin corrosion / irritation test result	**Species:** Rabbit **Evaluation result:** Causes burns.
Assessment of skin corrosion / irritation, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of eye damage or irritation, classification	Not classified. (Based on available data, the classification criteria are not met.)
Substance	Didecyldimethylammonium chloride
Respiratory or skin sensitisation	**Method:** OECD 406 **Species:** Guinea pigs **Result:** Negative **Comments:** Buehler test
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Respiratory or skin sensitisation	**Method:** OECD 406 **Species:** Guinea pigs **Result:** Negative **Comments:** Buehler test
Assessment of respiratory sensitisation, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of skin sensitisation, classification	Not classified. (Based on available data, the classification criteria are not met.)
Substance	Didecyldimethylammonium chloride
Germ cell mutagenicity	**Method:** OECD 471 **Evaluation result:** Negative **Comments:** Ames test **Method:** OECD 473 **Evaluation result:** Negative **Comments:** Chromosome aberration test In vitro. **Method:** OECD 476 **Evaluation result:** Negative **Comments:** In vitro breast cell gene mutation test.
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Germ cell mutagenicity	**Method:** OECD 471 **Evaluation result:** Negative **Comments:** Ames test **Method:** OECD 476 **Evaluation result:** Negative **Comments:** In vitro breast cell gene mutation test. **Method:** OECD 473 **Evaluation result:** Negative **Comments:** Chromosome aberration test **Method:** OECD 474 **Species:** Mouse **Evaluation result:** Negative **Comments:** Micronucleus test

Assessment of germ cell mutagenicity, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of carcinogenicity, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of reproductive toxicity, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of specific target organ toxicity - single exposure, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of specific target organ toxicity - repeated exposure, classification	Not classified. (Based on available data, the classification criteria are not met.)
Assessment of aspiration hazard, classification	Not classified. (Based on available data, the classification criteria are not met.)

Symptoms of exposure

In case of ingestion	Not relevant route of exposure.
In case of skin contact	Repeated or prolonged skin contact may cause slight irritation.
In case of inhalation	Vapor/mist: Mild respiratory irritation.
In case of eye contact	May cause slight irritation.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Didecyldimethylammonium chloride
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** > 0,1 - 1 mg/l **Effect dose concentration :** LC50 **Exposure time:** 96 hour(s) **Species:** Danio rerio **Method:** OECD 203
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** > 0,1 - 1 mg/l **Effect dose concentration :** LC50 **Exposure time:** 96 hour(s) **Species:** Lepomis macrochirus
Substance	Didecyldimethylammonium chloride
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** > 0,01 -0,1 mg/l **Effect dose concentration :** EC50 **Exposure time:** 72 hour(s) **Species:** Pseudokirchneriella subcapitata **Method:** OECD TG 201 **Toxicity type:** Acute **Value:** > 0,01 -0,1 mg/l

	Effect dose concentration : NOEC **Exposure time:** 72 hour(s) **Species:** Pseudokirchneriella subcapitata **Method:** OECD TG 201
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** > 0,01 -0,1 mg/l **Effect dose concentration :** EC50 **Exposure time:** 72 hour(s) **Species:** Pseudokirchneriella subcapitata **Method:** OECD TG 201 **Toxicity type:** Acute **Value:** > 0,001 -0,01 mg/l **Effect dose concentration :** NOEC **Exposure time:** 72 hour(s) **Species:** Pseudokirchneriella subcapitata **Method:** OECD TG 201
Substance	Didecyldimethylammonium chloride
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** > 0,01 -0,1 mg/l **Effect dose concentration :** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna **Method:** OECD TG 202 **Toxicity type:** Chronic **Value:** > 0,01 - 0,1 mg/l **Effect dose concentration :** NOEC **Exposure time:** 21 day(s) **Species:** Daphnia magna **Method:** OECD TG 211
Substance	Alkyl (C12-16) dimethylbenzyl ammonium chloride
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** > 0,01 -0,1 mg/l **Effect dose concentration :** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna **Method:** Directive 67/548 / EEC, Annex V, C.2. **Toxicity type:** Chronic **Value:** > 0,01 -0,1 mg/l **Effect dose concentration :** NOEC **Exposure time:** 21 day(s) **Species:** Daphnia magna **Method:** OECD TG 211
Ecotoxicity	Not classified as environmentally hazardous chemical.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	Biodegradable.
Biodegradability	Method: OECD 301D Comments: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Readily biodegradable. Didecyldimethylammonium chloride: Readily biodegradable.

12.3. Bioaccumulative potential

Substance	Didecyldimethylammonium chloride
Bioconcentration factor (BCF)	**Value:** 2,1 **Comments:** Low potential for bioaccumulation.
Bioaccumulation, evaluation	No bioaccumulation is to be expected.

12.4. Mobility in soil

Mobility	No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Contains no PBT/vPvB substances.

12.6. Other adverse effects

Additional ecological information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Remove to an authorized waste treatment plant. The stated EWC code is indicative and must be considered in relation to the actual condition of the chemical. The final code must be determined by the user, based on the actual use of the chemical.
EWC waste code	EWC waste code: 070699 wastes not otherwise specified Classified as hazardous waste: No

SECTION 14: Transport information

Dangerous goods	No

14.1. UN number

Comments	Not regulated.

14.2. UN proper shipping name

Comments	Not relevant.

14.3. Transport hazard class(es)

Comments	Not relevant.

14.4. Packing group

Comments	Not relevant.

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

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

SECTION 15: Regulatory information

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

Biocides	Yes
References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No 1907/2006 REACH. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. The Hazardous Waste Regulations Regulation (EC) No 528/2012 concerning the making available on the market and use of biocidal products.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H301 Toxic if swallowed. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.
Key literature references and sources for data	The safety data sheet is prepared on the basis of information provided by the manufacturer.
Abbreviations and acronyms used	DNEL: Derived-No Effect Level EC50: The effective concentration of substance that causes 50% of the maximum response. LC50: Median lethal concentration. LD50: Median lethal dose. NOEC: No-Observed Effect Concentration PBT: Persistent Bioaccumulative Toxic.

	PNEC: Predicted No-Effect Concentration vPvB: Very Persistent and Very Bioaccumulative
Version	1
Prepared by	SDS-Chemie, Bente Frogner.