

SAFETY DATA SHEET REGULATION (EC) No: 1907/2006 (REACH)

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

1.1. Product identifier:

Product name: Bradoderm Soft

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

Biocidal product, product type: PT1

Suitable for hygienic hand disinfection. For professional use.

Use it concentrated, undiluted.

Do not mix with other cleaning and disinfecting agents!

1.3. Details of the supplier of the safety data sheet

Manufacturer: Florin Ltd
Address: 17. Kenyérgyári út, Szeged, 6725
Phone Number: 0062 592 100
Fax: 0062 592 145
E-mail: info@florin.hu

1.4. Emergency telephone number

Health Toxicology Information Service (HTIS)

Address: 2. Nagyváradi tér, Budapest, 1096, Hungary

Telephone: +36 80 201 199

+36 1 476 6464

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Determination of the product: mixture

Classification according to 1272/2008/EC regulation

Flam. Liq. 2 H225

The full text for all Classification and Hazard Statements is displayed in Section 16.

2.2. Label elements

Hazard pictogram:



Word of caution: Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

Additional informations: Do not touch electrical equipment until your hands are completely dry. Do not mix with other cleaning and disinfecting agents! Use only on intact skin.

2.3. Other hazards: PBT or vPvB criteria: Not applicable.
No other hazards known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ingredients	EU-number	CAS-number	Conc. (%)	Classification 1272/2008/EK	Type
Ethanol	200-578-6	64-17-5	<73	Flam. Liq. 2 H225	(2)
Alkyl (C12-C16) dimethylbenzyl ammonium chloride	270-325-2	68424-85-1	≤0,40	Acute Tox. 4 (oral) H302 Skin Corr. 1B, H314 Aquatic Acute 1 H400 Acuatic Chronic 1 H410	(1)

Type:

- (1) Material classified according to health or environmental danger
- (2) Material has occupational exposure limit
- (3) Material meets the PBT criteria according to XIII. Annex of 1907/2006/EC decree
- (4) Materials meet the vPvB criteria according to XIII. Annex of 1907/2006/EC decree
- (5) Substance subject to authorization Annex XIV to Regulation (EC) No 1907/2006 Annex, or SVHC of particular concern. Occupational exposure limits, if available, are detailed in section 8.

REACH registration number:

Ethanol: 01-2119457610-43-0147

The full text for all Classification and Hazard Statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- Inhalation: Remove the injured person to fresh air.
- Skin contact: Contaminated clothing should be removed and the affected skin area washed with plenty of water. In case of complaint, consult a doctor.
- Eye contact: Rinse the eyes with running water for at least 10 minutes, pulling the edges of the eyelids apart and constantly moving the eyeball. If symptoms persist, consult a specialist.
- Ingestion: If swallowed, rinse mouth thoroughly, then drink plenty of water. Do not induce vomiting. If necessary, the patient should receive medical attention.

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

No data is available on the product. See Section 11 for information on ingredients.

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

Treat symptomatically. No special treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: water spray, CO₂, dry powder, alcohol-resistant foam.

Unsuitable extinguishing media: strong jet water

5.2. Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture:

Fire or heating may increase the pressure and cause the container to rupture.

Ethanol vapors mix well with air and may form an explosive mixture, exploding on ignition of air containing 3.3 to 19% by volume of ethanol vapor.

After dilution with a significant amount of water, the preparation loses its flammability.

Decomposition products may include the following materials: carbon dioxide, carbon monoxide.

5.3. Advice for firefighters

Protective measures: In the event of a large fire, wear protective clothing and self-contained breathing apparatus in a confined or poorly ventilated area.

Water spray or water mist can be used to cool containers exposed to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Only emergency personnel can be on site, other people must be removed.

Personal precautions: Ensure adequate ventilation.

Open flames, sources of ignition and sparks must be removed.

6.2. Environmental precautions

Do not allow product to reach surface or ground water, soil or sewage system.

6.3. Methods and material for containment and cleaning up

Absorb large spills or spillage with inert absorbent material (sand, ground) and collect in closed, labeled container, kept away from heat and sources of ignition. Contaminated material must be disposed of in accordance with regulations.

6.4. Reference to other sections

Personal protection: Check SECTION 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat and sources of ignition. Avoid contact with eyes. Do not eat, drink or smoke during use. Do not mix with other cleaning and disinfecting agents.

7.2. Conditions for safe storage, including any incompatibilities

Store in original, undamaged, unopened container in a dry, cool, well-ventilated place, away from open flames and ignition sources, protected from sunlight. Self life: 3 years

7.3. Specific end use(s).

The uses specified in 1.2. section, hand disinfection.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Name of ingredient	Exposure threshold limit According to 5/2020. (II. 6.) ITM regulations
Ethanol	TWA value: 1900 mg/m ³ STEL-value: 3800 mg/m ³

DNEL:

Alkyl (C12-C16) dimethylbenzylammonium chloride

Population	Route of exposure	Potential health effects	Value
Workers	Inhalation	Long-term, systemic effect	3,96mg/m ³
	Dermal	Long-term, systemic effect	5,7mg/kg bw/day
Consumers	Inhalation	Long-term, systemic effect	1,64mg/m ³
	Dermal	Long-term, systemic effect	3,4mg/kg bw/day
	Oral	Long-term, systemic effect	3,4mg/kg bw/day

PNEC:

Alkyl (C12-C16) dimethylbenzylammonium chloride

Environment	Value
Fresh water	0,0009mg/l
Sea water	0,00096mg/l
Periodic use/release	0,00016mg/l
Freshwater sediment	12,27mg/kg dry weight
Marine sediment	13,09 mg/kg dry weight
Sewage treatment plant	0,4mg/l
Soil	7mg/kg dry weight

8.2. Exposure controls

Personal protective equipment: No personal protective equipment required when the product is used properly and as directed.

General protective and hygiene measures: Avoid contact with eyes, ingestion and inhalation of vapors. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not touch electrical equipment until your hands are completely dry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- | | |
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| a) Appearance: | colorless liquid |
| b) Odour: | alcoholic, slightly perfumed |
| c) Odour threshold: | not specified for the mixture |
| d) pH: | 5,5-6,5 |
| e) Melting point/freezing point: | not specified for the mixture |
| f) Initial boiling point and boiling range: | not specified for the mixture |
| g) Flash point: | 23°C |
| h) Evaporation rate: | no data available |
| i) Flammability (solid, gas): | not flammable |
| j) Upper/lower flammability or explosive limits: | no data available |
| k) Vapour pressure: | no data available |
| l) Vapour density: | no data available |
| m) Relative density: | 0,875-0,895 g/cm ³ |
| n) Solubility(ies): | soluble with water in any concentration. |
| o) Partition coefficient n-octanol/water: | no data available |
| p) Auto-ignition temperature: | not self-igniting |
| q) Decomposition temperature: | not specified for the mixture |

- r) Viscosity: not specified for the mixture
s) Explosive properties: not explosive
t) Oxidising properties: does not show oxidizing properties

9.2. Other informations

No further information is available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific data are available on the reactivity of this product or its ingredients.

10.2. Chemical stability

The product is stable at the required storage temperature under normal working conditions.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Sunlight, radiant heat, heating, ignition source, sparks, open flame should be avoided.

10.5. Incompatible materials

Other cleaning and disinfecting agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Targeted toxicological studies have not been performed on the product. The human health assessment was made solely on the basis of its composition, the toxicological data for each component, the concentrations and classifications given in section 3, and the concentration limits of Regulation (EC) No 1272/2008.

The product is physically hazardous, flammable.

11.1. Information on toxicological effects

- a) **Acute toxicity:** not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Acute Tox. (oral): 1590mg/kg – calculation method LD ₅₀ (oral, rat): 795mg/kg – OECD 401 LD ₅₀ (dermal, skin): 3412mg/kg – OECD 401

- b) **Skin corrosion / irritation:** not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Causes severe burns.

- c) **Serious eye damage / eye irritation:** not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Causes serious eye damage.

- d) **Respiratory or skin sensitization:** no special information available.
- e) **Germ cell mutagenicity:** no special information available.
- f) **Carcinogenicity:** no specific information available
- g) **Reproductive toxicity:** no specific information available
- h) **Specific target organ toxicity - single exposure (STOT):** no specific information available
- i) **Specific target organ toxicity - repeated exposure (STOT):** no special information available
- j) **Aspiration hazard:** no special information available

SECTION 12: Ecological information

Ecological studies have not been performed on the product. It has been assessed solely on the basis of its composition, the data for each component, the concentrations and classifications given in section 3, and the concentration limits of Regulation (EC) No 1272/2008.

The preparation is not classified as dangerous for the environment.

12.1. Toxicity: not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Acute LC ₅₀ (fish, 96 hours) 0,515 mg/l – EPA OPP 72-1 Acute LC ₅₀ (daphnia, 48 hours) 0,016 mg/l – 440/2008/EK C.2. annex Acute EC ₅₀ (alga, 96 hours) 0,03 mg/l – OECD 201 NOEC (Pseudokirchneriella subcapitata, 96hours): 0,0025mg/l – OECD 201 Acute Chronic NOEC (Pimephales promelas, 28 days): 0,0322mg/l – U.S. EPA FIFRA 74-4(a) Acute Chronic NOEC (Daphnia magna, 21 days): 0,0125mg/l – OECD 211

12.2. Persistence and degradability: not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Readily biodegradable Biodegradation: 95.5%, exposure time: 28 days - OECD 301 B

12.3. Bioaccumulative potential: not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Log Pow 0,004 – OECD 107

12.4. Mobility in soil: no special information available.

12.5. Results of PBT and vPvB assessment: Not applicable.

12.6. Other adverse effects: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposed of uncleaned packaging and packaging containing residual material may be disposed of in accordance with the applicable regulations.

Dispose of contaminated packaging properly.

SECTION 14: Transport information

14.1. UN-number	1170
14.2. UN proper shipping name	Ethanol solution
14.3. Transport hazard class(es)	3
14.4. Packing group	II.
14.5. Environmental hazards	none
14.6. Special precautions for user	none
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	not applicable

SECTION 15: Regulatory information

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

Considered European Union laws and regulations:

- Regulation (EC) No 1272/2008 on Classification, Labeling and Packaging of substances and mixtures (CLP Regulation)
- Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- REGULATION 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (Text with EEA relevance)
- Regulation (EU) 528/2012 on the marketing and use of biocidal products

Related Hungarian laws and regulations:

- 2000. year XXV. Act on Chemical Safety
- Decree 44/2000 (XII.27.) EüM on the detailed rules of certain procedures and activities related to dangerous substances and dangerous preparations
- Joint Decree 38/2003 (VII.7.) ESzCsM-FVM-KvVM on the conditions for the production and placing on the market of biocidal products
- 5/2020. (II. 6.) ITM Decree on the protection of the health and safety of workers exposed to chemical pathogens
- CLXXXV of 2012. Act on Waste Management
- Decree 72/2013 VM KöM on the list of wastes
- 225/2015 Government Decree on the conditions for carrying out activities related to hazardous waste
- 2015 LXXXIX. Act promulgating the consolidated text of Annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), as amended and supplemented in 2011

15.2. Chemical safety assessment: No chemical safety report was prepared for the mixture.

SECTION 16: Other information

Abbreviations used in the safety data sheet:

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
DNEL:	Derived No-Effect Level

EC ₅₀ :	Half maximal effective Concentration The concentration of a drug, antibody or toxicant which induces a response halfway between the baseline and maximum after a specified exposure time
HTIS:	Health Toxicology Information Service
LC ₅₀ :	Lethal Concentration. Lethal Concentration for the 50 % of living organism.
LD ₅₀ :	Lethal Dose. The amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals
LogKow:	Octanol-water partition coefficient. The level of exposure to a substance above which humans should not be exposed
OECD:	Organisation for Economic Cooperation and Development
OPP:	Environmental Protection Agency
PBT:	Persistent, Bioaccumulative, Toxic
PNEC:	Predicted No-Effect Concentration
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
TWA:	Time weighted Average the average exposure to a contaminant to which workers may be exposed without adverse effect over a period such as in an 8-hour day or 40-hour week (an average work shift).
STEL:	Short-Term Exposure Limit limit value above which exposure to a chemical substance should not occur and usually relates to a 15 minute reference period.
UN:	four-digit numbers that identify hazardous materials, and articles (such as explosives, flammable liquids, oxidizers, toxic liquids, etc.) in the framework of international transport. Given by the United Nations
vPvB:	very Persistent, very Bioaccumulative

Full text of classifications:

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment (acute)
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion

Full text of H-statements:

H225	Highly flammable liquid and vapour.
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.

Information for readers:

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The safety data sheet describes the product in terms of safety requirements. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

End of safety data sheet