

## 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:** Bradonett disinfectant liquid soap

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

Biocidal product, product type: PT1

Recommended use of the mixture: Disinfectant soap can be used for hand washing and patient bathing.

Antimicrobial spectrum: bactericide (MRSA), fungicide, selective virucid (adenovirus and norovirus inactivating effect), tuberculocide.

#### 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](mailto: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

Eye Dam. 1 H318

Skin Irrit. 2 H315

Aquatic Chronic 2 H411

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:**

H315 Causes skin irritation.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

EUH208 – Contains Methylisothiazolinone. May produce an allergic reaction.

**Additional informations:** Do not mix with other cleaning and disinfecting agents!

Biocidal active substances:

Ethanol (96%) (CAS: 64-7-5) 18.0%;

Alkyl (C12-C16) dimethylbenzylammonium chloride (CAS: 68424-85-1) 2.4%;

Didecyldimethylammonium chloride (CAS: 7173-51-5) 2.0%.

**2.3. Other hazards:** PBT or vPvB criteria: Not applicable. None known.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

Ingredients	Conc. (%)	EU-number	CAS-number	Classification 1272/2008/EK	Type
Alkyl (C12-C16) dimethylbenzylammonium chloride	2,4	270-325-2	68424-85-1	Acute Tox. 4, H302 Skin Corr. 1B H314 Aquatic Acute 1 H400 Aquatic Chronic1 H410 (M:10)	(1)
Didecyldimethyl ammonium chloride	2,00	230-525-2	7173-51-5	Flam. Liq. 3 H226, Skin Corr. 1B H314, Eye Dam.1 H318, Aquatic Acute 1. H400 (M=10), Acute Tox.3 H301, Aquatic Chronic 2 H411.	(1)
Ethanol	18,0	200-578-6	64-17-5	Flam. Liq. 2 H225	(2)
Glycereth-7 Caprylate/ Caprate	≥5,0	-	361459-38-3	Eye Dam.1 H318	(1)
C8-C14 alkyl glucoside	≥5,0	604-232-9	141459-38-3	Eye Dam.1 H318	(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:

Alkyl (C12-C16) dimethylbenzylammonium chloride: 01-2119983287-23-0000

Didecyldimethyl ammonium chloride: 01-2119945987-15-0000

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.

Ingestion: Rinse mouth with water, drink plenty of water and seek medical advice.

Skin contact: Not relevant when used as directed.

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. Remove contact lenses, if present and easy to do.

### 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

The product is not flammable, non-flammable liquid.

### 5.1. Extinguishing media

Suitable extinguishing media: water spray, dry powder, alcohol-resistant foam, CO<sub>2</sub>. It should be selected taking into account the substances in the environment.

Unsuitable extinguishing media: not known.

### 5.2. Special hazards arising from the substance or mixture

Toxic gases may be released under the influence of heat and combustion.

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

### 5.3. Advice for firefighters

Protective measures: In the event of a major fire, wear self-contained breathing apparatus and heat suit. Prevent entry of the extinguishing agent into drains, surface and ground water, if possible.

## 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.

Be aware of the risk of slipping. Clean up spilled product immediately.

**6.1.1. For non-emergency personnel:** No activity may be carried out which involves personal risk or for which the worker has not received appropriate training. Avoid contact with eyes and mucous membranes. In case of closed space, provide adequate ventilation. Only persons involved in evacuation should be in the area.

**6.1.2. For emergency providers:** No activity may be carried out which involves personal risk or for which the worker has not received appropriate training. Avoid contact with eyes and mucous membranes. In case of closed space, provide adequate ventilation. Ensure adequate ventilation if ventilation is inadequate. Wear suitable respiratory equipment. Avoid release to the environment.

### 6.2. Environmental precautions

Do not allow undiluted product or its packing material to reach live water, sewage system or soil.

### 6.3. Methods and material for containment and cleaning up

Absorb large spills or spillage with inert absorbent material (sand, ground or universal/inert absorbent). Collect in labeled, lockable, marked container and dispose of in accordance with local regulations. In case of accidental spillage and entry into surface waters, the mixture should be diluted with a large amount of water. If applicable, follow the emergency plan. The residue should be washed with plenty of water.

Ensure adequate ventilation.

### 6.4. Reference to other sections

Personal protection: Check Section 8 and Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep out of reach of children. Avoid release to the environment. IF IN EYES: 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. Contains Methylisothiazolinone. May produce an allergic reaction.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in the original, intact, unopened container, dry, cool but frost-free, well-ventilated place protected from heat and direct sunlight for 2 years from the date of manufacture.

### 7.3. Specific end use(s).

For information on use, see section 1.2 of the safety data sheet, instructions on the label.

Do not mix with alkali, alkaline mixture, other cleaning and disinfecting agents!

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The mixture is within the permissible limits in workplace air in accordance with 5/2020. (II. 6.) of the ITM, it has an exposure limit value among the hazardous components given in point 3.

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

### 8.2. Exposure controls

#### 8.2.1. Appropriate technical inspection

Ensure adequate ventilation. Avoid contact with eyes and eyes. Ensure workers are familiar with the properties of the mixture and protect the environment. Observe personal hygiene regulations, do not eat, drink or smoke when using the mixture.

#### 8.2.2. Personal precautions, such as personal protective equipment

**Eye / face protection:** Not required under normal use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin protection:** Not required for proper use.

**Hand protection:** Not required under normal use. The product has a degreasing effect and can dry out your hands after repeated use several times a day. In case of dehydration, use Skin Nourishing Cream. Use of the product on damaged skin is not recommended.

**Respiratory protection:** Not required under intended use.

**Thermal hazards:** Under the stated storage conditions, no thermal hazards are to be expected when using the product.

**8.2.3. Environmental exposure controls:**

Follow handling and storage instructions and do everything possible to prevent the mixture from spilling into running water, soil or sewage.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

a) Appearance:	clear, viscous, colorless liquid
b) Odour:	without scent, alcoholic odor
c) Odour threshold:	not applicable
d) pH:	5,0-6,0
e) Melting point/freezing point:	not applicable
f) Initial boiling point and boiling range:	not specified for the mixture
g) Flash point:	>60°C
h) Evaporation rate:	not specified for the mixture
i) Flammability (solid, gas):	not flammable
j) Upper/lower flammability or explosive limits:	not explosive
k) Vapour pressure:	not applicable
l) Vapour density:	not applicable
m) Relative density:	approx. 1g/cm <sup>3</sup>
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:	140 mPas (Brookfield 4/20)
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**

The mixture reacts with alkali, alkaline mixtures, anionic surfactants, strong oxidizing and reducing agents.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

The mixture reacts with alkali, alkaline mixtures, anionic surfactants, strong oxidizing and reducing agents.

**10.4. Conditions to avoid**

Protect from high temperatures, direct sunlight, radiant heat, heat sources, frost.

**10.5. Incompatible materials**

Strong oxidizing agents, alkalis, alkaline mixtures, other disinfectants, anionic surfactants.

#### 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.

#### 11.1. Information on toxicological effects

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

*Substance(s):*

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	LD <sub>50</sub> (oral, rat): 795 mg/kg ATE <sub>dermal</sub> : >5000 mg/kg
Didecyldimethyl ammonium chloride	LD <sub>50</sub> (oral, rat): 238 mg/kg LD <sub>50</sub> (dermal, rabbit): 3342 mg/kg
Glycereth-7 Caprylate/ Caprate	LD <sub>50</sub> (oral, rat): >2000 mg/kg
C8-C14 alkyl glucoside	LD <sub>50</sub> (oral, rat): >2000 mg/kg

- b) **Skin corrosion / irritation:** the mixture causes skin irritation.
- c) **Serious eye damage / eye irritation:** the mixture causes 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:** not specified for the mixture.
- h) **Specific target organ toxicity - single exposure (STOT):** no specific information available.
- i) **Specific target organ toxicity - repeated exposure (STOT):** not specified for the mixture.
- 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.

12.1. **Toxicity:** not specified for the mixture.

*Substance(s):*

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	EC <sub>10</sub> (Selenastrum capricornutum, 72 hours): 0,0025 mg/l – OECD 201 EC <sub>50</sub> (Selenastrum capricornutum, 72 hours): 0,02 mg/l – OECD 201 EC <sub>50</sub> (Daphnia magna, 48 hours): 0,016 mg/l LC <sub>50</sub> (Oncorhynchus mykiss, 96 hours): 0,85 mg/l – OECD 203 NOEC (Daphnia magna, 21 days): 0,025 mg/l – OECD 211 EC <sub>20</sub> (activated sludge, 0,5 hours): 5 mg/l – OECD 209
Glycereth-7 Caprylate/ Caprate	Acute EC <sub>50</sub> (Daphnia, 48 hours): 10 – 100 mg/l Acute LC <sub>50</sub> (fish, 96 hours): 10 – 100 mg/l

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

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	OECD 301 D Closed-Bottle-Test: >60% Activated sludge OECD 303 A: Activated Sludge Units: >90% Activated sludge
Glycereth-7 Caprylate/ Caprate	OECD 301 B (CO <sub>2</sub> Evolution Test, 28 nap) >60% ISO 11734: >60%

**12.3. Bioaccumulative potential:** not specified for the mixture.

Substance(s):

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	LogKow (Shake Flask Method) 2,88 - OECD 107 LogPow: 1,72

**12.4. Mobility in soil:** Not specified for the mixture.

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

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

**12.7. Further information**

Ingredients	Information
Alkyl (C12-C16) dimethylbenzylammonium chloride	Dissolved organic carbon (COD) value: 1130 mg O <sub>2</sub> / g product

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

The product is classified as hazardous waste according to the European Waste Catalog. Waste must be protected from release into the environment. Used absorbent should also be treated as hazardous waste.

**Legal regulation of waste management:** Do not allow undiluted product or its packaging into live water, sewers or soil. The empty bottle or can must be rinsed with water, then the cleaned containers can be recycled or treated as municipal waste. Uncleaned packaging material and product residues should be disposed of as hazardous waste.

**Recommended waste classification:** 07 04 99: wastes not otherwise specified.

**Recommended classification for contaminated packaging:** 15 01 10 \* packaging waste containing residues of or contaminated by dangerous substances. For clean and clean-washed packaging: 15 01 02: plastic packaging wastes. Empty and cleaned packaging can be recycled.

#### SECTION 14: Transport information

Transport is subject to the requirements of the ADR.

<b>14.1. UN-number</b>	3082
<b>14.2. UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS LIQUID, M.N.N. (didecyldimethylammonium chloride, benzalkonium chloride)
<b>14.3. Transport hazard class(es)</b>	9
<b>14.4. Packing group</b>	III.
<b>14.5. Environmental hazards</b>	yes
<b>14.6. Special precautions for user</b>	none
<b>14.7. Transport in bulk according to Annex II of Marpol and the IBC Code</b>	not applicable

#### SECTION 15: Regulatory information

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

Field of application, proposed application, storage, disposal and first aid information can be found on the label.

**SEVESO category:** The product is classified in the SEVESO category according to Government Decree 219/2011 (X. 20.). (Table 2: Substances and preparations dangerous for the environment: very toxic to aquatic organisms)

##### 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
- 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



ATE	Acute toxicity estimate
CAS:	Chemical Abstracts Service
COD:	Chemical Oxygen Demand
EC <sub>10</sub> :	Effective concentration The concentration of a drug, antibody or toxicant which induces a response 10% after a specified exposure time
EC <sub>20</sub> :	Effective concentration The concentration of a drug, antibody or toxicant which induces a response 20% after a specified exposure time
EC <sub>50</sub> :	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
ISO:	International Organization for Standardization
LC <sub>50</sub> :	Lethal Concentration for the 50 % of living organism.
LD <sub>50</sub> :	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
Log Kow:	Octanol-water partition coefficient The level of exposure to a substance above which humans should not be exposed,
NOAEL:	No-Observed-Adverse-Effect Level
NOEL:	No Observed Effect Level Concentration
NOEC:	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT:	Persistent, Bioaccumulative, Toxic
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
Aquatic Chronic	Hazardous to the aquatic environment
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation

#### Full text of H-statements:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

H315	Causes skin irritation.
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.

The mixture was classified using the interpolation principles referred to in Article 9 of the CLP Regulation.

**Training checks:**

The person using the mixture should be educated about the risks associated with a treatment, health and environmental regulations. It can be viewed with the hazardous properties of a product, an occupational environmental and environmental hazards, and the first primary service activity.

**Suggested usage restrictions:**

The field of application given in point 1 contains only the most typical. Application in special applications is the responsibility of the user. In this case, the user is solely responsible for its application to local and national regulations. The safety information describes the product in terms of safety and cannot be considered as a technical specification of the product.

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.

**Changes to the previous release during the revision:** 1.4., 8.1., 9.1., 16. sections and 10.3., 12.3., 12.5., 12.6. section titles were affected.

**End of safety data sheet**