

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: Bradosept

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

Biocidal product. Surface disinfectant.

Biocidal product type: PT2.

Area of application: Can be used for disinfection of alcohol-resistant, small surfaces and equipment.

For professional use.

Ready-to-use liquid. The product should be used concentrated, undiluted.

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

Eye Irrit. 2 H319

STOT SE 3 H336

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.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements:

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

P233 Keep container tightly closed.

P261 Avoid breathing vapours/spray.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

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

Other statements:

Can only be operated on an electrical device which has been disconnected from the power supply.

Should not be used on alcohol sensitive surfaces.

Do not mix with other cleaning and disinfecting agents.

Biocidal active substances:

Ethanol (96%): 40% (CAS: 64-17-5)

2-propanol: 34% (CAS: 67-63-0)

Polyhexamethylene biguanide hydrochloride and hexamethylene diamin polimer: 0,02% (CAS: 27083-27-8/32289-58-0).

Hazardous components:

Ethanol, 2-propanol, Polyhexamethylene biguanide hydrochloride and hexamethylene diamin polimer.

2.3. Other hazards:

None known. Results of PBT and vPvB assessment: not prepared for the product.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Ingredients	EU-number	CAS-number	Conc. (%)	Classification 1272/2008/EK	Type
Etanol (96%)	200-578-6	64-17-5	35-45	Flam Liq 2 H225	(2)
2-propanol	200-661-7	67-63-0	30-35	Flam Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336	(1), (2)
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polimer	polimer	27083-27-8, 32289-58-0	< 0,05	Acute Tox. 4 H332 Eye Irrit. 2 H319 Skin Sens. 1 H317 Carc.2 H351 STOT RE 1 H372 Aquatic Chronic 1 H410 Aquatic Acute 1 H400	(1), (2)

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

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

REACH registration number:
Ethanol: 01-2119457610-43-0147
2-propanol: 01-2119457558-25-0000

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Remove victim to fresh air.
Skin contact: Remove contaminated clothing and footwear, wash affected skin area thoroughly with plenty of water. Seek medical attention if symptoms occur.
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: Rinse mouth with water and drink 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 during firefighting:
In a fire or if heated, a pressure increase will occur and the container may burst. 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 closed or poorly ventilated area.
Water spray or water mist may 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.
Ignition and spark sources must be removed.

6.2. Environmental precautions

It is forbidden to discharge the preparation or its unused residue, packaging material into living water, soil. Do not allow the product to enter public sewers without dilution!

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, labelled container, keep 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

Can only be operated on an electrical device which has been disconnected from the power supply. Should not be used on alcohol sensitive surfaces. Do not mix with other cleaning and disinfecting agents. Keep away from heat and sources of ignition. Avoid contact with eyes. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s).

The 1.2. uses specified in point. Instructions can be found on the label.

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: 1900mg/m ³ STEL: 3800 mg/m ³
2-propanol	TWA: 500 mg/m ³ STEL: 1000 mg/m ³ It's also absorbed through the skin.
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polimer	TWA: 0,012 mg/m ³

DNEL:

2-propanol

Population	Potential health effects and route of exposure	Value
Workers	long-lasting, dermal, systematic effect	888 mg/kg/day
	long-lasting, inhalation, systematic effect	500 mg/m ³
Consumers	long-lasting, dermal, systematic effect	319 mg/kg/day
	long-lasting, inhalation, systematic effect	89 mg/m ³
	long-lasting, oral, systematic effect	26 mg/kg/day

PNEC:

2-propanol

Environment	Value
Fresh water	140,9 mg/l
Sea water	140,9 mg/l
Periodic use/release	140,9 mg/l
Sediment	552 mg/kg
Soil	28 mg/kg
Sewage treatment plant	2,251 mg/l
Oral	160 mg/kg food

8.2. Exposure controls

Personal protective equipment: No personal protective equipment required for proper and intended use of the product.

General protective and hygienic 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. Disinfection of electrical equipment can only be done after de-energizing. Adequate ventilation must be provided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance:	colourless liquid
b) Odour:	alcoholic
c) Odour threshold:	not applicable
d) pH:	not applicable
e) Melting point/freezing point:	not applicable
f) Initial boiling point and boiling range:	not specified for the mixture
g) Flash point:	22°C
h) Evaporation rate:	not specified for the mixture
i) Flammability (solid, gas):	not applicable
j) Upper/lower flammability or explosive limits:	not specified for the mixture
k) Vapour pressure:	not specified for the mixture
l) Vapour density:	not specified for the mixture
m) Relative density:	0,85 – 0,87g/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 information: propane-butane propellant, the container is pressurized.

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, hot surfaces, radiant heat, heating, ignition source, sparks, open flame.

10.5. Incompatible materials

Other cleaning and disinfecting products.

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):

<u>Substance(s):</u> Ingredients	Information
2-propanol	LD ₅₀ (oral, rat): 5840 mg/body weight kg LD ₅₀ (dermal, rabbit): 13900 mg/body weight kg LD ₅₀ (inhalation, rat, 6h): >25 mg/l
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polimer	LD ₅₀ (oral, rat, female): 2504 mg/kg LD ₅₀ (oral, rat, male): 2727 mg/kg LD ₅₀ (inhalation, 4h): 1,85 mg/l LD ₅₀ (dermal, rat): >2000 mg/kg

b) **Skin corrosion/irritation:** no specific information available.

c) **Serious eye damage/eye irritation:** the mixture causes severe eye irritation.

Substance(s):

Ingredients	Information
2-propanol	Causes eye irritation.
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polimer	Causes eye irritation. (rabbit)

d) **Respiratory or skin sensitization:** no specific information available.

e) **Germ cell mutagenicity:** the mixture is not mutagenic.

f) **Carcinogenicity:** the mixture is not carcinogenic.

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):** not specified for the mixture.

Substance(s):

Ingredients	Information
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polimer	Causes damage to the respiratory tract through prolonged or repeated inhalation.

j) **Aspiration hazard:** no specific 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 harmful for the environment.

12.1. Toxicity: not specified for the mixture.

Substance(s):

Ingredients	Information
2-propanol	LC ₅₀ (Pimephales promelas, 96 h): 9640 mg/l EC ₅₀ (Daphnia magna, 48 h): 10000 mg/l EC ₅₀ (green algae, 7 days): 1800 mg/l IC ₅₀ (Lactuca sativa, 3 days): 2104 mg/l
Poly hexamethylene biguanide hydrochloride and hexamethylene diamin polymer	IC ₁₀ (bacterium): 40 mg/l

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

Substance(s):

Ingredients	Information
2-propanol	The substance is readily biodegradable. BOD ₅ : 53% ThOI: 72%

12.3. Bioaccumulative potential: not specified for the mixture.

Substance(s):

Ingredients	Information
Ethanol	Log P _{o/w} : <1

12.4. Mobility in soil: no specific information available.

12.5. Results of PBT and vPvB assessment: no specific information available.

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal of packaging containing residual material and packaging waste may be in accordance with the provisions of the relevant European directives.

SECTION 14: Transport information

14.1. UN-number	1170
14.2. UN proper shipping name	Ethanol solution, m.n.n. (isopropanol, ethanol)
14.3. Transport hazard class(es)	3
14.4. Packing group	III.
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, Labelling 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
BOI:	Biochemical oxygen demand
CAS:	Chemical Abstracts Service
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
IC ₁₀	Inhibitory concentration. A measure of the ability of a substance to inhibit a particular biological or biochemical function. A quantitative measure of how much of a particular inhibitor is required to inhibit a given biological process or biological component in vitro by 10%.
IC ₅₀	Half Maximal Inhibitory Concentration. A measure of the ability of a substance to inhibit a particular biological or biochemical function. A quantitative measure of how much of a particular inhibitor is required to inhibit a given biological process or biological component in vitro by 50%.
LC ₅₀ :	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
LogPow:	Octanol-water partition coefficient

PBT:	Persistent, Bioaccumulative, Toxic
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
ThOI:	Theoretical oxygen demand
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. The 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)
Carc.	Carcinogenicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity — repeated exposure
STOT SE	Specific target organ toxicity — single exposure

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
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.