

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: Bradolife 96% Alcoholic air treating aerosol

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

For treating the air of busy offices, waiting rooms, rooms, common areas and vehicles.

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

Fam. Aerosol 1 H222, H229

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:

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements:

P102 Keep out of reach of children.

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

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C.

2.3. Other hazards: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ingredients	EU-number	CAS-number	REACH registration number	Conc. (%)	Classification 1272/2008/EK	Type
Propane	200-827-9	74-98-6	01-2119486944-21	≤47	Flam. Gas 1 H220	(2)
Butane	203-448-7	106-97-8	01-2119474691-32		Press. Gas H280	
Ethanol	200-578-6	64-17-5	01-2119457610-43	<60	Flam. Liq. 2 H225	(2)

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

- (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.

SECTION 4: First aid measures

4.1. Description of first aid measures

- Inhalation: Remove the injured person to fresh air, keep at rest in a position comfortable for breathing.
- Skin contact: Wash affected skin area thoroughly with plenty of water. If irritation persists (or occurs after washing), seek medical attention.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If necessary, take the injured person to a specialist.
- Ingestion: Rinse mouth thoroughly and 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.
 - 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, if not hazardous, containers should be removed from the fire area.

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

Avoid entry of unused product residues and packaging into living water, public sewers and soil.

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

For personal protection see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not spray on a naked flame or any incandescent material. Avoid inhalation of the spray of the preparation, direct contact with the preparation, contact with skin and eyes. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not eat, drink or smoke during use. Keep out of reach of children.

7.2. Conditions for safe storage, including any incompatibilities

Store in the original, intact, unopened container, in a dry, cool, well-ventilated place, protected from heat and direct sunlight.

7.3. Specific end use(s).

The uses specified in 1.2. section. 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
Butane	TWA value: 2350 mg/m ³ STEL-value: 9400 mg/m ³
Ethanol	TWA value: 1900 mg/m ³ STEL-value: 3800 mg/m ³

8.2. Exposure controls

Personal protective equipment: No personal protective equipment required when the product is used properly and for its intended purpose.

General protective and hygiene measures: Avoid contact with eyes and inhalation of spray. Adequate ventilation must be provided. Eating, drinking and smoking should be prohibited in areas where this material is handled

and stored. Wash your hands thoroughly after using the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance:	Clear, colorless liquid, propane-butane propellant aerosol formulation
b) Odour:	Alcoholic
c) Odour threshold:	No data available
d) pH:	No data available
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:	Not specified for the mixture
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	Not specified for the mixture
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:	0,798 - 0,808 g/cm ³ (data for a solution without propellant)
n) Solubility(ies):	Soluble with water in any concentration.
o) Partition coefficient n-octanol/water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	Not applicable
r) Viscosity:	No data available
s) Explosive properties:	Propane-butane propellant composition
t) Oxidising properties:	Does not show oxidizing properties

9.2. Other informations

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

Temperatures above 50°C, sunlight, radiant heat, heating, ignition source, sparks, open flame.

10.5. Incompatible materials

No data available.

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
Propane	LC ₅₀ (inhalation, rat): 1443 mg/l (literature data)
Butane	LC ₅₀ (inhalation, rat): 658 mg/l (literature data)

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

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

d) **Respiratory or skin sensitization:** no special 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 special 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
Propane	LC ₅₀ (fish): 49,47 mg/l (literature data) LC ₅₀ (other aquatic organisms): 27,14 mg/l (literature data) EC ₅₀ (algae, 72 hours): 11,89 mg/l (literature data)
Butane	LC ₅₀ (fish): 24,11 mg/l (literature data) LC ₅₀ (other aquatic organisms): 14,22 mg/l (literature data) EC ₅₀ (algae, 96 hours): 7,71 mg/l (literature data)

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

12.3. Bioaccumulative potential: not specified for the mixture.

Substance(s):

Ingredients	Information
Propane	Log Kow ≤ 1,09-2,8 (literature data)
Butane	Log Kow ≤ 1,09-2,8 (literature data)

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal of packaging containing residual material may take place in accordance with the provisions of the relevant regulations. Completely emptied packaging can be disposed of as communal waste.

SECTION 14: Transport information

14.1. UN-number	1950
14.2. UN proper shipping name	AEROSOLS
14.3. Transport hazard class(es)	2
14.4. Packing group	-
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
- 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
- 34/2014. (X. 30.) NGM Decree on the requirements for the marketing of aerosol products and aerosol packaging

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
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
ETTSZ	Health Toxicology Information Service
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
Log Kow:	Octanol-water partition coefficient The level of exposure to a substance above which humans should not be exposed.
LogPow:	Octanol-water partition coefficient
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:

Flam. Aerosol	Flammable aerosol
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Pressurized gas

Full text of H-statements:

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.

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., 9.1., 10.3., 12.3., 12.5., 12.6. section titles were affected.

End of safety data sheet