SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. **Product identifier:**

Protect bed bug and flea killer spray

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

Ready to use insecticide against blood sucking (bed bug, flea) and other crawling insects, to be used in closed area, for consumer and professional use.
Biocide product type: 18

1.3. **Details of the supplier of the safety data sheet:**

Information about the manufacturer and distributor:
Bábolna Bioenvironmental Centre Ltd.
H-1107 Budapest, Szállás u. 6.
Tel.: (36-1) 432-0400

1.3.1. Responsible person: -
E-mail: info@babolna-bio.com

1.4. **Emergency telephone number:** +36 1 432 0400, (working hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the mixture:**

Classification according to Regulation 1272/2008/EC (CLP):
Flammable liquids, Hazard Category 2 – H225
Serious eye damage/eye irritation, Hazard Category 2 – H319
Hazardous to the aquatic environment – Chronic Hazard, Category 2 – H411

Warning **H statements:**
H225 – Highly flammable liquid and vapour.
H319 – Causes serious eye irritation.
H411 – Toxic to aquatic life with long lasting effects.

2.2. **Label elements:**

Active substance content:
Piperonylbutoxide (CAS: 51-03-6) 0,36 %
S-Methoprene (CAS: 65733-16-6) 0,28 %
Chrysanthemum cinerariaefolium, extract from open and mature flowers of Tanacetum cinerariifolium obtained with hydrocarbon solvents (CAS: 89997-63-7) 0,18 %

DANGER

Warning **H statements:**
H225 – Highly flammable liquid and vapour.
H319 – Causes serious eye irritation.
H411 – Toxic to aquatic life with long lasting effects.

EUH 208 – Contains n-Octyl bicycloheptene dicarboximide and Chrysanthemum cinerariaefolium extract. May produce an allergic reaction.

Precautionary **P statements:**
P102 – Keep out of reach of children.
P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 – Avoid breathing spray.
P273 – Avoid release to the environment.
P303 + **P361** + **P353** – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + **P351** + **P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 – Collect spillage.
P403 + **P235** – Store in a well-ventilated place. Keep cool.
P501 – Dispose of contents/container: the empty can, in small amount, can be disposed together with household waste.

Notes:
Biocide product, when labelling/packing Regulation (EU) No. 528/2012 (of 22 May 2012 concerning the making available on the market and use of biocidal products) should be followed.

2.3. **Other hazards:**
The main ingredient is ethyl-alcohol. Vapours in higher concentration and/ or by a longer exposition may cause confusion, headache, and intoxication, car driving is not suggested in this case.
Flammable liquid! Ventilate the area during treatment to avoid the formation of explosive concentration. Use of naked flame is prohibited during and after treatment till the entire ventilation. Do not spray on electric equipment and plugs.
Do not drink the product or the diluted product!
Do not pour into sewer.
According to Annex XIII, this mixture does not meet the criteria on persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances:**
Not applicable.

3.2. **Mixtures:**

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation 1272/2008/EC (CLP)		
					Hazard pictogram	Hazard category	H phrase
Ethanol*/** Index number: 603-002-00-5	64-17-5	200-578-6	01-2119457610-43	98	GHS02 GHS07 Danger	Flam Liq. 2 Eye Irrit. 2	H225 H319
MGK®264 / n-Octyl bicycloheptene dicarboximide* **	113-48-4	204-029-1	-	0,6	GHS07 GHS09 Warning	Acute Tox. 4 Skin Sens. 1A Aquatic Chronic 2	H332 H317 H411
Piperonylbutoxide * **	51-03-6	200-076-7	01-2119537431-46	0,36	GHS09 Warning	Aquatic Acute 1 Aquatic Chronic 1	H400 H410
S-Methoprene / Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyldodeca-2,4-dienoate Index number: 607-725-00-7	65733-16-6	-	-	0,28	GHS09 Warning	Aquatic Acute 1 M factor =1 Aquatic Chronic 1 M factor =1	H400 H410

Chrysanthemum cinerariaefolium extract / Chrysanthemum cinerariaefolium, extract from open and mature flowers of Tanacetum cinerariifolium obtained with hydrocarbon solvents (Redefined from Pyrethrins and Pyrethroids and Chrysanthemum cinerariaefolium, ext.)***	89997-63-7	289-699-3	-	0,18	GHS07 GHS09 Warning	Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	H302 H312 H332 H317 H400 H410

*: Substance having occupational exposure limit value.
**: Classification specified by the manufacturer that includes other classification in addition to the classification specified by Regulation (EC) No. 1272/2008.
***: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No. 1272/2008.

For the full text of H phrases: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures:**

INGESTION:

Measures:

- Do not induce vomiting.
- Wash the conscious person's mouth with plenty of water.
- Give the victim fresh water to drink

INHALATION:

Measures:

- Take the victim into fresh air.
- Loosen his clothes, let him rest and keep him warm.
- Get medical attention if feel unwell.

SKIN CONTACT:

Measures:

- Remove the contaminated clothes.
- Wash thoroughly the skin with water and soap.
- Wash contaminated clothing before re-use.

EYE CONTACT:

Measures:

- In case of contact with eyes flush with plenty of water holding eyelids apart (for at least 15 minutes).
- Remove the contact lenses if it's easily possible.
- In case of persistent irritation, obtain medical help.

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

Inhalation: Coughing, dizziness, headache, nausea.
Skin contact: Prolonged or repeated contact may cause skin dryness
Eye contact: Redness, stinging feeling, pain.
Ingestion: Stinging feeling, dizziness, headache, disorientation.

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

Personal protective clothes are not required during first aid measures.
Get medical attention if feel unwell or in case of ingestion.
Information to doctors: Treat as an alcoholic intoxication.

SECTION 5: FIREFIGHTING MEASURES

5.1. **Extinguishing media:**

5.1.1. **Suitable extinguishing media:**

Dry chemical powder, carbon dioxide, alcohol resistant foam, water mist.

5.1.2. **Unsuitable extinguishing media:**

No unsuitable extinguishing media known.

5.2. **Special hazards arising from the substance or mixture:**

Highly flammable liquid and vapour.

In case of fire, smoke and other combustion products (toxic gases containing carbon monoxide) may be formed; the inhalation of such combustion products can have serious adverse effects on health.

5.3. **Advice for firefighters:**

Wear full protective clothing and self-contained breathing apparatus.

Cool the fire affected containers with water spray to avoid their explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures:**

6.1.1. **For non-emergency personnel:**

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. **For emergency responders:**

Wear appropriate personal protective equipment (mask with filter ("A –type) or a self-contained breathing apparatus, protective clothes, gloves, boots).

Ensure adequate ventilation.

Remove sources of ignition.

Avoid formation of sparkle.

6.2. **Environmental precautions:**

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. **Methods and material for containment and cleaning up:**

In case of small leakages (1-2 bottles) the room should be ventilated, and the liquid released should be collected using absorbing substances, and then the place should be washed.

In case of larger leakages:

Collect the spilled product with non-combustible absorbent (dry sand or earth, grinded limestone), then place into a suitable, closed, properly labelled chemical waste container for removal/disposal.

Use only non-sparking tools during the contamination process.

Wash up with plenty of water and detergent.

6.4. **Reference to other sections:**

For further and detailed information see section 7, 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. **Precautions for safe handling:**

Observe conventional hygiene precautions.

Do not inhale vapours/aerosols.

Keep away from food, drink and animal feed.

Do not eat, drink, or smoke when using this product.

Wash hands and face thoroughly after the use of this product.

Technical measures:

Use the product in a well-ventilated room.

Precautions against fire and explosion:

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

7.2. **Conditions for safe storage, including any incompatibilities:**

Technical measures and storage condition:
Keep in the original and appropriately labelled container in a vertical position.
Store in cool, dray and properly ventilated place.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Do not store with calcium hypochlorite and hypo.
If the quantity is bigger, safe electrical equipment (against explosion) and lights are necessary.
Keep away from food, drink and animal feed.
Incompatible materials: see section 10.5
Packaging material: no special prescriptions.

7.3. **Specific end use(s):**
Follow the instruction of label.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Occupational exposure limit values (Commission Directive 2000/39/EC of 8 June 2000):
The components of the mixture are not regulated with exposure limit value.

National occupational exposure limit values:

Czech Republic (Nařízení vlády č. 246/2018 Sb):
Ethanol (CAS: 64-17-5):
PEL: 1000 mg/m^3
NPK-P: 3000 mg/m^3

United Kingdom (EH40/2005 Workplace Exposure Limits):
Ethanol (CAS: 64-17-5):
Long term, 8 hours: 1000 ppm; 1920 mg/m^3

Croatia (NN 91/2018 (12. 10. 2018)):
Ethanol (CAS: 64-17-5):
GVI: 1000 ppm; 1900 mg/m^3

Malta (ATT DWAR L-AWTORITÀ GĦAS-SAĦĦA U S-SIGURTÀ FUQ IL-POST TAX-XOGĦOL (KAP. 424)):
The components of the mixture are not regulated with exposure limit value.

Germany (gemäß TRGS 900 zuletzt geändert und ergänzt: GMBl 2019 S. 117-119 [Nr. 7] (v. 29.03.2019):
Ethanol (CAS: 64-17-5):
Limit value: 200 ppm; 380 mg/m^3

Romania (Hotărârea nr. 584/2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici):
Ethanol (CAS: 64-17-5):
Long term, 8 hours: 1000 mg/m^3; 1920 pp
Short term, 15 min.: 9500 mg/m^3; 5000 ppm

Slovakia (Nariadenie vlády Slovenskej republiky č. 33/2018 Z. z.):
Ethanol (CAS: 64-17-5):
Average: 500 ppm; 960 mg/m^3
Short term: 1000 ppm; 1920 mg/m^3

Etanol (CAS-szám: 64-17-5):

DNEL values		**Oral exposure**		**Dermal exposure**		**Inhalative exposure**	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	950 mg/m³	no data
	Systemic	no data	87 mg/kg bw/day	no data	206 mg/kg bw/day	no data	114 mg/m³
Worker	Local	no data	no data	no data	no data	1900 mg/m³	no data
	Systemic	no data	no data	no data	343 mg/kg bw/day	no data	950 mg/m³

PNEC values		
Compartment	Value	Note(s)
Freshwater	0.96 mg/l	no note(s)
Seawater	0.79 mg/l	no note(s)
Freshwater sediment	3.6 mg/kg sediment dry weight	no note(s)
Seawater sediment	no data	no note(s)
Wastewater Treatment Plant (STP)	580 mg/l	no note(s)
Intermittent release	no data	no note(s)
Secondary poisoning	no data	no note(s)
Soil	0.63 mg/kg soil dry weight	agricultural

8.2. **Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. **Appropriate engineering controls:**

In pursuance of work is proper foresight needed to avoid leaking onto clothes and floors and to avoid contact with eyes and skin.
Consumer use: Ensure suitable ventilation, do not inhale vapours/spray.
In the treated area do not use naked flames, do not smoke.
Use protective gloves, wash hands after work.

8.2.2. **Individual protection measures, such as personal protective equipment:**

Ensure suitable ventilation, do not inhale vapours/spray.
Wash hands after work and remove protective equipment.
In the treated area do not use naked flames, do not smoke.

1. **Eye/face protection:** If there is a risk of eye contact, use appropriate protective glasses (EN 166).
2. **Skin protection:**
    a. **Hand protection:** Use appropriate protective gloves (EN 374).
    b. **Other:** Use appropriate protective clothing.
3. **Respiratory protection:** In case of inadequate ventilation, use appropriate gas mask with A type filter.
4. **Thermal hazards:** no thermal hazards known.

8.2.3. **Environmental exposure controls:**

No specific prescription.

The requirements detailed in section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Parameter	**Value / Test method / Remarks**
1. **Appearance:**	**yellowish transparent liquid**
2. **Odour:**	**characteristic, alcoholic**
3. Odour threshold:	no data*
4. pH:	7 (neutral)

5.	Melting point/freezing point:	no data*
6.	Initial boiling point and boiling range:	80 °C
7.	Flash point:	ca. 16 °C
8.	Evaporation rate:	no data*
9.	Flammability (solid, gas):	no data*
10.	Upper/lower flammability or explosive limits:	3.3 – 19 v/v %
11.	Vapour pressure:	5.8 kPa (20 °C)
12.	Vapour density:	no data*
13.	Relative density:	0.79 (25 °C)
14.	Solubility(ies):	fully soluble in water
15.	Partition coefficient: n-octanol/water:	no data*
16.	Auto-ignition temperature:	no data*
17.	Decomposition temperature:	no data*
18.	Viscosity:	1.2 mPa.s (20 °C)
19.	Explosive properties:	liquid is not explosive; the vapours form an explosive mixture with air
20.	Oxidizing properties:	not oxidizing

9.2. **Other information:**
Ignition temperature: 425 °C.
*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:**
React slowly with: Calcium hypochlorite, silver oxide, ammonia; react rapidly with strong oxidising agents (i.e. nitric acid, silver nitrate, peroxides) causing fire and explosion hazard.

10.2. **Chemical stability:**
The mixture is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. **Possibility of hazardous reactions:**
Hazardous reactions are not expected.

10.4. **Conditions to avoid:**
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep away from temperatures above 50 °C.

10.5. **Incompatible materials:**
Calcium hypochlorite, silver oxide, ammonia, strong oxidising agents (i.e. nitric acid, silver nitrate, peroxides).

10.6. **Hazardous decomposition products:**
No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on toxicological effects:**
Acute toxicity: Based on available data, the classification criteria are not met.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

11.1.1. **Summaries of the information derived from the test conducted:**
No data available.

11.1.2. **Relevant toxicological properties:**
Data about the product:
LD_{50} (oral, rat): >5000 mg/kg
LD_{50} (dermal, rat): >2000 mg/kg

Information about the components:
Ethanol (CAS: 64-17-5):
LD_{50} (oral, rat): 10 470 mg/kg
LD_{50} (dermal, rabbit): 15 800 mg/kg
LC_{50} (inhalative, rat): 30 000 mg/m³ air/4 hours
Skin corrosion/irritation: rabbit – not irritative.
Eye irritation: rabbit – irritation.
Reproductive toxicity:
NOAEL (2 generation study): 13 800 mg/kg
NOAEC (inhalative study): 16 000 ppm
Repeated target organ toxicity (STOT):
NOAEL: 1730 mg/kg bw/day
MGK®264; n-Octyl bicycloheptene dicarboximide (CAS: 113-48-4):
LD_{50} (oral, rat, female): 5000 mg/kg
LD_{50} (dermal, skin): >5000 mg/kg
LC_{50} (inhalative, rat): 1,98 mg/l/4 hours
Primary skin irritation (rabbit): irritation lasted within 72 hours.
Skin sensitisation (guinea pig): positive.
Skin irritation index: 1.75
Primary eye irritation (rabbit): irritation lasted within 7 days
NOEL (subchronic exposure, rat): 400 mg/m³/3 month
NOEL (chronic, rat): 50 mg/kg/day/24 month
NOEL (chronic, dog, diet): 250 ppm/12 month
Carcinogenicity: not carcinogen-
Oncogenicity:
NOEL (rat): 450 mg/kg/day/24 month
NOEL (mouse): 50 mg/kg/day/8 month
Reproductive toxicity:
NOEL (rat): >10 000 ppm
Teratogenicity:
NOEL (maternal toxicity, rat): 300 mg/kg/day
NOEL (developmental toxicity, rat): 1000 mg/kg/day
NOEL (foetal toxicity, rabbit): 100 mg/kg/day
Mutagenicity: negative during CHO-chromosome aberration test.
Piperonylbutoxide (CAS: 51-03-6):
LD_{50} (oral, rat): >4700 mg/kg
LD_{50} (dermal, rabbit): >2000 mg/kg
LC_{50} (inhalative, rat): 5,9 mg/l/4 hours
S-Methoprene (CAS: 65733-16-6):
LD_{50} (oral, rat): >5050 mg/kg
LD_{50} (dermal, rabbit): >5050 mg/kg
Chrysanthemum cinerariaefolium extract (CAS: 89997-63-7):
LD_{50} (oral, rat): 1030 mg/kg
LD_{50} (dermal, rabbit): >2000 mg/kg
LC_{50} (inhalative, rat): 3.4 mg/l/4 hours
Primary skin irritation (rabbit): mild irritation within 72 hours.
Skin irritation index: 0.42.
Skin sensitisation at local lymph node test (refined Pyrethrum concentrate – nominal 50 % pyrethrines).
Primary eye irritation (rabbit): irritation lasted within 72 hours.
Reproductive toxicity:
2 generation study, rat: no reproductive effect was observed.
NOEL (parent and new-born toxicity): 100 ppm
NOEL (reproduction parameters): 3000 ppm
Teratogenicity: no teratogen effect was observed
NOEL (maternal toxicity, rabbit): 25 mg/kg/day
NOEL (foetal development, rabbit): 250 mg/kg/day
NOEL (maternal and development toxicity, rat): 75 mg/kg/day
Mutagenicity: no mutagen effect was observed.
Ames test: no positive effect.
Structural chromosome aberration test on (CHO) cells: regarded as negative.
Neurotoxicity:
NOEL (oral, rat, male): 40 mg/kg

NOEL (oral, rat, female): 20 mg/kg
Carcinogenicity: not carcinogen.

11.1.3. Information on likely routes of exposure:
Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:
Inhalation: Coughing, dizziness, headache, nausea.
Skin contact: Prolonged or repeated contact may cause skin dryness
Eye contact: Redness, stinging feeling, pain.
Ingestion: Stinging feeling, dizziness, headache, disorientation.
The main ingredient is ethyl-alcohol. Vapours in higher concentration and/ or by a longer exposition may cause confusion, headache, and intoxication, car driving is not suggested in this case.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Causes serious eye irritation
Contains n-Octyl bicycloheptene dicarboximide and Chrysanthemum cinerariaefolium extract. May produce an allergic reaction.

11.1.6. Interactive effects:
No data available.

11.1.7. Absence of specific data:
No information.

11.1.8. Other information:
No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity:**
Toxic to aquatic life with long lasting effects.
Information about the components:
Ethanol (CAS: 64-17-5):
LC_{50} (fish): 11 200 mg/l/24 hours
EC_{10}/LC_{10} or NOEC (freshwater invertebrates): 9,6 mg/l/48 hours
EC_{10}/LC_{10} or NOEC (freshwater algae): 11,5 mg/l/4 days
MGK®264; n-Octyl bicycloheptene dicarboximide (CAS: 113-48-4):
LC_{50} (rainbow trout): 1,4 ppm/96 hours
LC_{50} (bluegill): 2,4 ppm/96 hours
LC_{50} (bobwhite quail): >5620 ppm/5 days (no mortality)
LC_{50} (Mallard duck): >5620 ppm/5 days (no mortality)
Chrysanthemum cinerariaefolium extract (CAS: 89997-63-7):
LC_{50} (rainbow trout): 5,2 µg/l/96 hours
LC_{50} (bluegill): 10 µg/l/96 hours
LC_{50} (mosquitofish): 16 µg/l/96 hours
LC_{50} (Daphnia magna): 2 µg/l/48 hours
LC_{50} (mysida): 1,4 µg/l/96 hours
LC_{50} (Eastern oyster): 87 µg/l/96 hours
LC_{50} (bobwhite quail): >5620 ppm/5 days
LC_{50} (Mallard duck): >5620 ppm/5 days
LD_{50} (bobwhite quail): >2000 mg/kg/5 days
Not target insect toxicity:
LD_{50} (honey bee): 0,022 µg/bee

12.2. **Persistence and degradability:**
Information about the components:
Ethanol (CAS: 64-17-5):
Substance is readily biodegradable and it does not accumulate in the environment.
MGK®264; n-Octyl bicycloheptene dicarboximide (CAS: 113-48-4):
Biodegradation: Aerobic and anaerobic soil metabolism are very slow (mean aerobic half-life was 341 days).
Chemical degradation: Stable to hydrolysis, direct aqueous photolysis and soil photolysis.

12.3. **Bioaccumulation potential:**
Information about the components:
Ethanol (CAS: 64-17-5):
Non-bioaccumulative.
log Kow: -0,35
BCF: 3,2

12.4. **Mobility in soil:**
Information about the components:
Ethanol (CAS: 64-17-5):
Very volatile, easily evaporates from the surface of the soil.
MGK®264; n-Octyl bicycloheptene dicarboximide (CAS: 113-48-4):
Moderately mobile in sand and sandy loam soils (Koc = 636 in sand) and slightly mobile in silt loam and clay loam soils (Koc = 3106 in clay loam).

12.5. **Results of PBT and vPvB assessment:**
No data available.

12.6. **Other adverse effects:**
No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods:**
Disposal according to the local regulations.

13.1.1. **Information regarding the disposal of the product:**
Dispose of in accordance with applicable regulations.
Do not empty into drains, surface and ground water.
Do not reuse the material or the packaging for any other purposes.
Consumer use: The empty packaging can be disposed together with household waste in small quantity.
Professional use: Dispose as hazardous waste.
Recommended disposal method: incineration.
List of Waste Code:
Recommendation:
16 03 05* organic wastes containing hazardous substances
*: hazardous waste

13.1.2. **Information regarding the disposal of the packaging:**
Dispose of in accordance with applicable regulations.
List of Waste Code:
16 03 05* packaging containing residues of or contaminated by hazardous substances
*: hazardous waste

13.1.3. **Physical/chemical properties that may affect waste treatment options shall be specified:**
No data available.

13.1.4. **Sewage disposal:**
No data available.

13.1.5. **Special precautions for any recommended waste treatment:**
No data available.

SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:

14.1. **UN Number:**
UN 1993

14.2. **UN proper shipping name:**
FLAMMABLE LIQUID, N.O.S. (contains Ethanol)

14.3. **Transport hazard class(es):**
3

14.4. **Packaging group:**
II

14.5. **Environmental hazards:**
Environmentally hazardous: yes.

14.6. **Special precautions for user:**
No relevant information available.

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:**

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

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)

REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2. **Chemical safety assessment:** Has not been carried out.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:
The safety data sheet has been revised according to Regulation (EU) 2015/830.

Reason for new version:
Version 2: Section 14, Transport information has been complemented by the following sentence, in line with the product classification.
" Dangerous for the environment "
Version 3: update according the 1272/2008/EC (CLP regulation)
Version 4: update administrative parts (830/2015/EK)
Version 5: update S-methoprene classification
Version 6.1: The composition and hazard classification of the mixture was modified compared to the previous version and all Sections concerned (section 1-16).

This Safety Data Sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

Literature references / data sources:
Previous version (16. 04. 2018, version 5) of the safety data sheet.
Hungarian version of the safety data sheet (31. 01. 2020, version 4)

Methods used for the classification according to Regulation 1272/2008/EC:

Classification	Method
Flammable liquids, Hazard Category 2 – H225	Based on test methods (test data)
Serious eye damage/eye irritation, Hazard Category 2 – H319	Based on calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 2 – H411	Based on calculation method

Relevant H-Phrases (number and full text) of Section 2 and 3:
H225 – Highly flammable liquid and vapour.
H302 – Harmful if swallowed.
H312 – Harmful in contact with skin.
H317 – May cause an allergic skin reaction.
H319 – Causes serious eye irritation.
H332 – Harmful if inhaled.
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.
EUH 208 – Contains n-Octyl bicycloheptene dicarboximide and Chrysanthemum cinerariaefolium extract. May produce an allergic reaction.

Training advice: no data available.

Full text of the abbreviations in the safety data sheet:
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
AOX: Adsorbable organic halides.
BCF: Bioconcentration factor.
BOD: Biological Oxygen Demand.
CAS number: Chemical Abstract Service number.
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.
COD: Chemical Oxygen Demand.
CSA: Chemical Safety Assessment.
CSR: Chemical Safety Report.
DNEL: Derived-No-Effect-Level.
ECHA: European Chemical Agency.
EC: European Community.
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).
EEC: European Economic Community.
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European Norm.
EU: European Union.
EWC: European Waste Catalogue (replaced by LoW – see below).
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
IMSBC: International Maritime Solid Bulk Cargoes.
IUCLID: International Uniform Chemical Information Database.
IUPAC: International Union of Pure and Applied Chemistry.
Kow: n-Octanol - Water Partition Coefficient.
LC50: Lethal concentration resulting in 50 % mortality.
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).
LoW: List of Waste.
LOEC: Lowest Observed Effect Concentration.
LOEL: Lowest Observed Effect Level.
NOEC: No Observed Effect Concentration.
NOEL: No Observed Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
OECD: Organization for Economic Cooperation and Development.
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic.
PNEC: Predicted No Effect Concentration.
QSAR: Quantitative Structure Activity Relationship.
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
SCBA: Self Contained Breathing Apparatus.
SDS: Safety Data Sheet.
STOT: Specific Target Organ Toxicity.
SVHC: Substances of Very High Concern.
UN: United Nations.
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.
VOC: Volatile Organic Compound.
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.
The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.
The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.
Users are cautioned to determine the appropriateness and applicability of the above information to their circumstances and purposes and assume all risk associated with the use of this product.
It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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