BÁBOLNA BIOENVIRONMENTAL CENTRE LTD.
BUDAPEST

SAFETY DATA SHEET

Biopren 6 EC bed bug and flea killer concentrate

Biopren (BFS) 6 EC bed bug and flea killer concentrate

Date of revision: 11/12/2019 **Version: 12**

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

1.1 Product identifier: BIOPREN 6 EC bed bug and flea killer concentrate,
Biopren (BFS) 6 EC bed bug and flea killer concentrate

1.2. Relevant identified uses of the substance or mixture and uses advised against: product for professionals, usage in closed area against blood sucking (bed bug, flea) and other crawling insects. To be diluted with water.

Uses advised against: use in accordance with the label, other application is forbidden

1. 3. Details of the supplier of the safety data sheet:

Bábolna Bioenvironmental Centre Ltd.

Address: H-1107 Budapest, Szállás u. 6.

Tel.: (36-1) 432-0400 Fax.: (36-1) 432-0401

e-mail: info@babolna-bio.com

1. 4. Emergency phone numbers:

HU OKBI phone on duty: (06-80) 201-199

UK : Emergency telephone (24h); +36 70 637 5436

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture:

Serious eye damage, Aspiration toxicity I, Aquatic acute I, chronic 1. Skin sensitization I

2.2. Label elements

Danger
H304 May be fatal if swallowed and enters airways.
H318 Causes serious eye damage.
H317 May cause allergic skin reaction
H410 Very toxic to aquatic life with long lasting effects.

P280 Wear protective gloves/protective clothing/eye protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P302+P352 IF ON SKIN: Wash with plenty of water
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P501 Dispose of contents/container as dangerous waste

2.3. Other hazards
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: substance: not applicable
3.2: mixture

Ingredients	%	EC number	CAS number	REACH Registration number	Classification according 1272/2008/EK Dir.	
					Danger class code of category	Hazard statements
Hydrocarbons C10-C13 n-alkanes, isoalkanes, cyclic, <2% aromatics	50	918-481-9	-	01-2119457273-39-xxxx	Asp. Tox.1	H304
n-octyl bicycloheptene dicarboximide (MGK)	16	204-029-1	113-48-4	Not available	Acut tox. 4 Aquatic Chronic 2 Skin Sens1	H332 H411 H317
Piperonyl-butoxide	10	200-076-7	51-03-6	01-2119537431-46	Aquatic Acute 1 Aquatic Chronic 1	H400 H410
S-methoprene	7	NA	65733-16-6	Not obligatory for registration	Aquatic Acute 1 Chronic 1	H400 H410
Chrysanthemum cinerariaefolium. extract from open and mature flowers of Tanacetum cinerariifolium obtained with hydrocarbon solvents	5	289-699-3	89997-63-7	Not obligatory for registration	Acut Tox. 4. Aquatic Acute 1 Aquatic Chronic 1 Skin Sens1	H332 H302 H400 H410 H317
Alcohols ethoxylated,C12-15,	5	932-186-2	106232-83-1	Not obligatory for registration	Eye Irrit.Cat2 Aq Acute1 Aq Chornic 3	H319 H400 H412

Calcium dodecylbenzene sulfonate	3	290-635-1	90194-26-6	Not available	Eye Dam.1	H318
Tridecyl alcohol ethoxylate	2	-	78330-21-9	Not available	Acut Tox. 4. Eye Dam.1	H302 H318

Hazard statements are fully listed in Section 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

4.1.1.

Inhalation: Remove the wounded to fresh air, loosen the tight clothes, rest and keep warm. Get medical attention if feel unwell.

Skin: Remove the contaminated clothes; wash thoroughly with plenty of water then rinse with soap and water.

Eye: Wash out with plenty of water for a few minutes; remove the contact lenses if it's easily possible. Seek an optometrist in case of bulging, redness, and bleary eyes.

Ingestion: Do not induce vomiting! Wash the conscious person's mouth with plenty of water.

4.1.2.

Contaminated clothes may be washed as usual. Personal protective clothes are not required during first aid measures.

4.2. Most important symptoms and effects

Inhalation: Coughing, dizziness, headache, nausea.

Skin contact: Prolonged or repeated contact may cause skin dryness or cracking.

Eye contact: Redness, stinging feeling, blurred vision.

Ingestion: Nausea, vomiting, abdominal pain.

Symptoms of lung exposure: Coughing, choking, wheezing, chest pain, shortness of breath, fever,

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

Immediately get medical attention in case of ingestion!

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Suitable extinguishing media: dry chemical powder, carbon dioxide, alcohol resistant foam, water mist. Use water jet to cool containers.

Unsuitable extinguishing media: strong water jet.

5.2. Special hazards arising from the substance or mixture

Toxic gases may form during combustion (carbon monoxide).

5.3. Advice for fire-fighters

wear self-contained breathing apparatus and usual protective clothes.

SECTION 6. Accidental release measures

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, proceed as follows.

6.1. Personal precautions, protective equipment and emergency procedures

Mask with filter ("A –type) or a self contained breathing apparatus, protective clothes, gloves, boots.

Ensure adequate ventilation! Keep out the sources of ignition, avoid formation of sparkle.

6.2. Environmental precautions

Prevent the contamination of surface water or sewege system. Inform the competent Authority in case of large spillage.

6.3. Methods and material for containment and cleaning up

Adsorb on with a suitable non-combustible material (sand, dry earth, etc.) and place into a closed container. Wash up with plenty of water and detergent. The remaining substances should be treated as dangerous waste.

6.4. Reference to other sections

See handling and storage Section 7, personal protection Section 8 and disposal Section 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Use the product in a well ventilated room. Do not inhale. Wear protective gloves. Remove any food or feeding staff before use. Do not eat, drink or smoke in the work area. After use wash your hands and face.

7.2. Conditions for safe storage

Store in a well-ventilated room. Keep away from heat, flames, other sources of ignition. Keep away from food, feed!
7.3. Specific end use(s):
Insecticide concentrate. Follow the instruction of label.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Exposition limit:

No national exposure limits have been established for this mixture.

For active substances:

Natural pyrethrins / new name: Chrysanthemum cinerariaefolium, extract from open and mature flowers of Tanacetum cinerariifolium obtained with hydrocarbon solvents: Occupational exposure limits: 1 mg/m³ 8 hour time-weighted average for Pyrethrins/Pyrethrum (Directive 2006/15/EC Indicative Occupational Exposure Limit Value, as nationally implemented in Austria (Grenzwerteverordnung 2011), Belgium (VLEP/GWBB), France (without sensitising lactones, VLE ED 984), Germany (TRGS-900; 15 minutes short term limit value same as 8 hour), Hungary (annex to Decree 25/2000 as amended), Italy (national legislation), Poland (Dziennik Ustaw 2002, No 217, item 1833, as amended), Spain (Royal Decree 374/2001 as amended), The Netherlands (Nationale wettelijke publieke grenswaarden) and the UK (purified of sensitising lactones, EH40/2005 as amended); Denmark yet to implement EU limit value, currently 5 mg/m3 8 hour, 10 mg/m3 short term (national legislation)); monitoring possible via OSHA Analytical Method 70 at http://www.osha.gov/dts/sltc/methods/organic/org070/org070.html (see also Elflein, L., Berger-Preiss, E., Preiss, A., Elend, M., Levsen, K. and Wunsch, G.: Human biomonitoring of pyrethrum and pyrethroid insecticides used indoors: determination of the metabolites E-cis/trans-chrysanthemumdicarboxylic acid in human urine by gas chromatographymass spectrometry with negative chemical ionization. J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci. 795(2): 195-207, 2003.).
S-methoprene: not regulated
PBO: not regulated

8.2. Individual protection measures and personal protective equipment

General protective and hygienic measures:
Wear clean and properly maintained personal protective equipment.
Personal protective equipment should be stored in a clean place outside the work area.
It is forbidden to eat, drink or smoke during work. The contaminated clothing should be washed before use again. Ensure adequate ventilation (especially in a closed area). Smoking is forbidden! Do not use naked flame!
Protective equipment: Protective goggles, clothing and gloves (breakthrough time min 8 h)

Take off after work. If ventilation is insufficient, use insert "A" in the gas mask.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: yellowish liquid
Smell: characteristic, petroleum like
Relative density (at 25°C): 0.89
pH: NA
Melting point: NA
Flash point: >70^{0}C
Ignition point: > 200 ^{0}C
Explosive properties: The liquid is not explosive; the vapours form an explosive mixture with air.
Lower/Upper explosive limits in air: 0,7-6 v/v %
Ignition temperature: NA
Gas pressure at 20°C: no available data
Solubility: soluble in organic solvents, forms emulsion with water
Viscosity at 20°C: no available data
Oxidizing properties: none

9.2: Other information: not applicable

SECTION 10. Stability and reactivity

10.1. Reactivity: Not characteristic.

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: unknown

10.4 Condition to avoid : temperature below 5 ºC or above 50 ºC, open flames, sources of ignitions

10.5. Incompatible materials: strong oxidizing agents

10.6. Hazardous decomposition products: unknown

SECTION 11. Toxicological information

11.1 Information on toxicological effects

calculated: LD50 acute, oral rat: >2000 mg/kg.

LD50 dermal, rabbit :>2000 mg/kg

The product causes serious damage in case of eye contact.

Properties of the ingredients:

S-methoprene:

LD50 acute, oral, rat: >5050 mg/kg. LD50 dermal, rabbit:>5050 mg/kg

Natural Pyrethrins:

LD50 acute, oral, rat: > 1000 mg/kg.

LD50 dermal, rabbit :> 5000mg/kg

LC50 inhalation, rabbit : 3.4 mg/l (h)

(b) skin corrosion/irritation: not classified based on the available data

(c) serious eye damage/irritation: Causes serious eye damage

(d) respiratory or skin sensitisation: may causes an allergic skin reaction

(e) germ cell mutagenicity: not classified based on the available data

(f) carcinogenicity: not classified based on the available data

(g) reproductive toxicity: not classified based on the available data

(h) STOT-single exposure: not classified based on the available data

(i) STOT-repeated exposure: not classified based on the available data

(j) aspiration hazard: Aspiration toxicity category I

SECTION 12. Ecological information

12.1. Toxicity: no data available for the product.

Ingredients	Fish LC_{50} (96 h)	Daphnia EC_{50} (46 h)	
S-methoprene	4,26 mg/l	0,22 mg/l	M=1
Natural Pyrethrins	5-10 µg/l	12µg/l	M=100
PBO	3,9 mg/l	0,51 mg/l	M=1

12.2. Persistence and degradability: no data available for the product.
12.3 Bioaccumulative potential: no data available for the product.
12.4 Mobility in soil: no data available for the product.
12.5 Results of PBT and vPvB assessment: not necessary.
12.6 Other adverse effects: no data available for the product

SECTION 13. Disposal

13.1. Waste treatment methods
the remaining mixture and package should be treated and disposed as dangerous waste.
Recommended method: incineration.

SECTION 14. Transport information

ADR/RID
It is not the subject of the regulations in the form of packaging (below 5 liters). **Special provision 375**

14.1. UN-number: 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (S-methoprene, nat. pyrethrum)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: Environmentally hazardous

IMDG Code
It is not the subject of the regulations in the form of packaging (below 5 liters). **2.10.2.7**

14.1. UN-number: 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (S-methoprene, nat. pyrethrum)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: Marine pollutant
EmS: F-A, S-F

IATA
It is not the subject of the regulations in the form of packaging (below 5 liters).
Special provision A197

14.1. UN-number: 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (S-methoprene, nat. pyrethrum)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
PAX: 964
CAO: 964
14.5. Environmental hazards: Environmentally hazardous

14.6. Special precautions for user: no
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code: no

SECTION 15. Regulatory information

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

Regulation 1907/2006/EC of the European Parliament and of the Council on the registration, evaluation, authorisation and restriction of chemicals (REACH)

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 (CLP)

SECTION 16. Other information

Full text of H hazard statements listed in Section 3

H danger phrases
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May causes allergic skin reaction
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.

Reason of new version:

Original version prepared on 27/10/2012
Version 2:
Change in Section 12 Ecological information:
1. New Daphnia magna acute toxicity study was conducted with s-methoprene (former study measured the nominal concentration; the new study measured the actual concentration.)
Version 3: update in accordance with 1272/2008/EC (CLP regulation),
change in Section 2, Section 3, Section 15 parts of the document
Version 4: update administrative parts (830/2015/EK)
Version 5 : update Section 14
Version 6: update administrative parts (830/2015/EK)
Version 7: update S-methopren classification
Version 8: correction of CAS No. in Section 3
Version 9: update MGK and mixture classification
Version 10: update of Section 3: new name for pyrethrum, Section 9: relative density correction from 0.84 to 0.89, update Section 8
Version 11: administrative change in Section 3
Version 12: Section 1: UK emergency number

The end of the Material Safety Data Sheet