COSHH RISK ASSESSMENT

Control of Substances Hazardous to Health Regulations 2002 (as amended)

1. ASSESSMENT DETAILS

Company / Site	Monarch Pest Control Services Ltd.
Assessment reference	COSHH 03
Assessed by	Patrick Condon
Date of assessment	13/10/2026
Review date	(13/10/2027, or sooner if the SDS, process or legislation changes)
Task / activity	Dilution and spray application of insecticide concentrate for bed bugs, fleas and other hiding insects in closed areas
Location(s) of use	Client Premises
Frequency / duration of use	As required
Quantity used / dilution rate	As required

2. PRODUCT IDENTIFICATION

Product name	**BIOPREN 6 EC bed bug and flea killer concentrate** **Biopren (BFS) 6 EC bed bug and flea killer concentrate**
Supplier / manufacturer	Bábolna Bioenvironmental Centre Ltd., H-1107 Budapest, Szállás u. 6., Hungary Tel: (36-1) 432-0400 | info@babolna-bio.com
Emergency telephone	+36 70 637 5436 UK: NPIS via NHS 111 (England), NHS 24 (Scotland), NHS Direct (Wales); Northern Ireland: local GP Healthcare professionals: UK NPIS 0344 892 0111
Identified use	Water-soluble insecticide (emulsifiable concentrate) against bed bugs, fleas and other hiding insects, for use in closed areas. Industrial, consumer and professional use. Biocide product type PT18.
Active substances	S-Methoprene (CAS 65733-16-6) 6.74 % Pyrethrum extract, Chrysanthemum cinerariaefolium (CAS 89997-63-7) 4.81 % Piperonyl butoxide (CAS 51-03-6) 10.07 %
SDS reference	Version 13, revised 16/09/2022 (first issued 27/10/2012). Revised to Regulation (EU) 2020/878
Physical form	Yellowish liquid, petroleum-like odour. Flash point > 70 °C. Explosion limits 0.7–6 vol.% (solvent can form explosive mixture with air). Relative density 0.89 (25 °C). Forms an emulsion in water.

3. HAZARD CLASSIFICATION & LABEL ELEMENTS

GHS05	GHS07	GHS08	GHS09
			
Corrosive (serious eye damage)	**Harmful / Irritant (skin sensitiser)**	**Health hazard (aspiration)**	**Environment**

Signal word	DANGER
Classification (CLP, EC 1272/2008)	Asp. Tox. 1 (H304) | Eye Dam. 1 (H318) | Skin Sens. 1 (H317) | Aquatic Acute 1 (H400) | Aquatic Chronic 1 (H410)
Hazard statements	H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P280 Wear protective gloves/protective clothing/eye protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of water and soap.

	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331 Do NOT induce vomiting. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P501 Dispose of contents/container: handle as hazardous waste.
Other hazards	Not PBT or vPvB. No endocrine disruptors based on available data.

4. HAZARDOUS INGREDIENTS

Substance	CAS / EC	Conc. %	Classification
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	– / 918-481-9	50	GHS08, Danger. Asp. Tox. 1, H304
n-Octyl bicycloheptene dicarboximide	113-48-4 204-029-1	16	GHS07, GHS09, Warning. Acute Tox. 4, H332; Skin Sens. 1A, H317; Aquatic Chronic 2, H411
Piperonyl butoxide	51-03-6 200-076-7	10.07	GHS09, Warning. Aquatic Acute 1, H400; Aquatic Chronic 1, H410
S-Methoprene	65733-16-6	6.74	GHS09, Warning. Aquatic Acute 1, H400; Aquatic Chronic 1, H410 (M=1)
Pyrethrum extract (Chrysanthemum cinerariaefolium)	89997-63-7 289-699-3	4.81	GHS07, GHS09, Warning. Acute Tox. 4, H302/H312/H332; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 (M=100)
Alcohols, C12-15, branched and linear, ethoxylated	106232-83-1 932-186-2	5	GHS07, GHS09, Warning. Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 3, H412
Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts	90194-26-6 290-635-1	3	GHS05, Danger. Eye Dam. 1, H318
Tridecyl alcohol ethoxylate	78330-21-9	2	GHS05, GHS07, Danger. Acute Tox. 4, H302; Eye Dam. 1, H318

5. WORKPLACE EXPOSURE LIMITS (EH40)

WEL (8-hr TWA / 15-min STEL)	None. SDS: components are not regulated with an exposure limit value (EH40/2005). Keep exposure as low as reasonably practicable.

6. ROUTES OF EXPOSURE & HEALTH EFFECTS

Route	Likelihood	Effects (from SDS)
Inhalation (spray/vapour)	☐ Low ☒ Med ☐ High	Cough, dizziness, headache, nausea.
Skin contact	☐ Low ☐ Med ☒ High	May cause an allergic skin reaction. Dry, cracked skin with prolonged or repeated exposure.
Eye contact	☐ Low ☒ Med ☐ High	Causes serious eye damage.
Ingestion / aspiration	☒ Low ☐ Med ☐ High	May be fatal if swallowed and enters airways. Nausea, vomiting, lower abdominal pain. Signs of lung entry: cough, asphyxia, breathing difficulty, chest pressure, shortness of breath, fever. Product LD50 oral > 2000 mg/kg (rat).
Environment	☐ Low ☒ Med ☐ High	Very toxic to aquatic life with long lasting effects (pyrethrum extract LC50 fish 5–10 µg/l).

7. PERSONS AT RISK

Group	At risk?	Notes
Pest control operatives	☒ Yes ☐ No	Mixing, dilution and spraying
Other employees / staff on site	☒ Yes ☐ No	Keep out of treated area until dry and ventilated
Public / customers / occupants	☒ Yes ☐ No	Exclude during treatment; do not spray bedsheets, people or toys
Children & pets (incl. fish tanks)	☒ Yes ☐ No	Remove pets; cover or remove aquaria
Persons with sensitised skin / asthma	☐ Yes ☐ No	Skin sensitiser; individual assessment
New / expectant mothers, young	☐ Yes ☐ No	Individual assessment

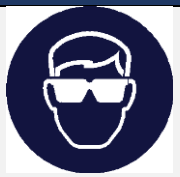
persons		

8. CONTROL MEASURES	
Elimination / substitution	Consider non-chemical control (heat, steam, vacuuming) or a less hazardous product first.
Engineering controls	Use in a well-ventilated place, especially closed areas. Avoid leaking onto clothes and floors. No open flames, no smoking; keep away from heat, sparks and ignition sources.
Safe handling	Use only as directed on the label. Remove food and feed before treatment. Do not spray on food, kitchen utensils, toys, humans, animals, plants or bedsheets. Do not breathe vapours. Ventilate after the treatment has dried before re-occupation.
Hygiene	Do not eat, drink or smoke when using. Wash hands and face thoroughly after use. Remove and wash contaminated clothing before reuse.
Storage	Original container, closed, in a dry, cool, well-ventilated place, max 35 °C, away from heat, direct sunlight and ignition sources. Separate from food and feed; out of reach of children. Avoid below 5 °C and above 50 °C. Incompatible: strong oxidising agents. Shelf life 2 years from production.
Training / information	Operatives trained in biocide use (e.g. RSPH/BPCA level 2) and briefed on this assessment, the label and the SDS.

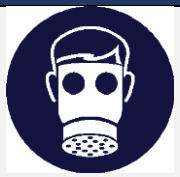
9. PERSONAL PROTECTIVE EQUIPMENT



Gloves



Eye protection



Respiratory protection (if poorly ventilated)

PPE	Requirement (from SDS)	Standard / notes
Eye / face	Appropriate protective glasses	EN 166. Goggles advised given Eye Dam. 1
Hand	Protective gloves, permeation time 8 hours; remove after use	EN 374
Body	Normal protective clothing	Coveralls when spraying
Respiratory	Gas mask with A-type filter if ventilation is inadequate	Filter type A (EN 14387). Face-fit tested

10. FIRST AID	
Ingestion	Do NOT induce vomiting (aspiration risk). Rinse mouth with water. IF SWALLOWED: immediately call a poison centre/doctor.
Inhalation	Move to fresh air. Loosen clothing, rest and keep warm. Get medical attention if unwell.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Wash clothing before reuse.
Eye contact	Flush with plenty of water for at least 15 minutes, holding eyelids apart. Remove contact lenses if easy. If swelling, redness or impaired vision, get medical help immediately.
Notes	Obtain medical help after ingestion or if unwell. PPE not necessary for first aiders (SDS).

11. SPILLAGE, FIRE & DISPOSAL	
Accidental release	Only trained staff in protective clothing. Ventilate and remove ignition sources. Small leak (1–2 bottles): absorb, collect and wash area. Larger leak: absorb with non-combustible material (dry sand, earth, ground limestone) into a closed, labelled chemical waste container, using non-sparking tools. Wash with water and detergent. Keep out of drains, soil and water; notify authorities if pollution occurs.
Fire	Use dry powder, CO2, alcohol-resistant foam or water spray; NOT a strong water jet. Combustion may produce toxic gases incl. carbon monoxide. Firefighters:

	SCBA and protective clothing; cool containers with water spray.
Waste disposal	Handle product residues and empty packaging as hazardous waste. Recommended method: incineration. LoW code to be determined with a waste disposal specialist.

12. SIGN-OFF			
Role	**Name**	**Signature**	**Date**
Assessor	Patrick Condon	Patrick Condon	19th October 2026
Manager / approver	George McConville	George McConville	19th October 2026

Source: Bábolna Bio BIOPREN 6 EC Safety Data Sheet, Version 13 (revised 16/09/2022). Read alongside the current SDS and product label, and review for site-specific conditions.