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 10
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	Weighing or measuring water-dispersible granules, mixing in a sprayer and applying as a residual surface spray against crawling and flying insects (ants, cockroaches, bed bugs, fleas, flies and others), professional pest control
Location(s) of use	Client Premises
Frequency / duration of use	As required
Quantity used	As required

2. PRODUCT IDENTIFICATION	
Product name	**K-OTHRINE WG250 (product code UVP 05942764, spec. 102000002830)**
UFI / authorisation no.	UK-2017-1082 (HSE 8092, from product label). Not stated in this SDS; check your pack label.
Supplier	Bayer Environmental Science, 230 Cambridge Science Park, Milton Road, Cambridge CB4 0WB, UK Tel: 00800 1214 9451 | ukinfo@bayercropscience.com (Brand now sold by Envu, Milton Hall, Ely Road, Milton, Cambridge CB24 6WZ)
Emergency telephone	SDS: 0800 220876 (UK, 24 h) Healthcare professionals: NPIS 0344 892 0111 (24 h) General public: NHS 111 (England, Wales, Scotland); Northern Ireland: GP or NHS 111
Identified use	Insecticide (biocide, PT18). Professional use only. Use according to the label.
Active substances	Deltamethrin (CAS 52918-63-5) 25 % w/w (250 g/kg)
SDS reference	Bayer SDS, Version 9 / GB, revised 17.08.2017 (printed 15.09.2017), to REACH 1907/2006 and 2015/830
Physical form	Beige water-dispersible granules, weak characteristic odour. pH 2.0–4.0 (1 % in water). Auto-ignition 268 °C. Dust may form an explosive mixture in air.

3. HAZARD CLASSIFICATION & LABEL ELEMENTS



GHS07
Harmful



GHS09
Environment

Signal word	WARNING
Classification (CLP, EC 1272/2008)	Acute Tox. 4 (inhalation) H332 | Aquatic Acute 1 H400 | Aquatic Chronic 1 H410
Hazard statements	H332 Harmful if inhaled. H410 Very toxic to aquatic life with long lasting effects.
Supplementary statements	EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Label identifiers	Deltamethrin
Precautionary statements	P261 Avoid breathing dust, mist, spray. P273 Avoid release to the environment. P391 Collect spillage. P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be

	disposed of as non-hazardous waste.
Other hazards	Burning or stinging sensations on the face and mucous membranes (paraesthesia), transient, up to 24 hours, without lesions. May form explosible dust-air mixture if dispersed. Not PBT/vPvB.

4. HAZARDOUS INGREDIENTS

Substance	CAS / EC	Conc. %	Classification
Deltamethrin	52918-63-5 258-256-6	25.00	Acute Tox. 3, H301; Acute Tox. 3, H331; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 (M = 1,000,000 acute and chronic)
Sulfonated aromatic polymer, sodium salt	68425-94-5	≤ 15	Eye Irrit. 2, H319
Aromatic hydrocarbons, C10-13, reaction products with branched nonene, sulfonated, sodium salts	1258274-08-6	≤ 10	Skin Irrit. 2, H315; Eye Dam. 1, H318
Citric acid	77-92-9 201-069-1	> 1 – < 5	Eye Irrit. 2, H319
Sodium dioctyl sulphosuccinate	577-11-7 209-406-4	> 1 – < 5	Skin Irrit. 2, H315; Eye Dam. 1, H318
Kaolin	1332-58-7 310-194-1	≥ 1	Not classified (has WEL)

5. WORKPLACE EXPOSURE LIMITS (EH40)

Substance	8-hr TWA	Basis
Kaolin (respirable dust)	2 mg/m³	EH40 WEL
Deltamethrin	0.02 mg/m³	Bayer internal OES only, no EH40 WEL
Dust, general (inhalable / respirable)	10 mg/m³ / 4 mg/m³	EH40 (not in SDS), COSHH default for dust

6. ROUTES OF EXPOSURE & HEALTH EFFECTS

Route	Likelihood	Effects (from SDS)
Inhalation (granule dust while mixing; spray mist)	☐ Low ☒ Med ☐ High	Harmful if inhaled (H332). Cough, sneezing, airway irritation. Systemic pyrethroid effects at high exposure: headache, dizziness, nausea, chest discomfort, tremors, convulsions.
Skin contact	☐ Low ☒ Med ☐ High	Paraesthesia: burning, tingling or stinging, especially on the face, usually gone within 24 h. Slight irritation. Not a sensitiser.
Eye contact	☐ Low ☒ Med ☐ High	Slight irritation and eye paraesthesia; ingredients include eye-damaging surfactants in the concentrate.
Ingestion	☒ Low ☐ Med ☐ High	LD50 oral (rat) > 3,465 mg/kg. Nausea, abdominal pain, vomiting, diarrhoea.
Environment	☐ Low ☐ Med ☒ High	Very toxic to aquatic life (Daphnia EC50 0.00018 mg/l). Highly toxic to fish and bees. Not rapidly biodegradable, immobile in soil.

7. PERSONS AT RISK

Group	At risk?	Notes
Pest control operatives	☒ Yes ☐ No	Mixing (dust) and spraying, especially indoors and overhead
Other employees / staff on site	☒ Yes ☐ No	Keep out of treated area until spray has dried
Public / customers / occupants	☒ Yes ☐ No	Exclude during treatment; do not treat bedding, clothing, pillows or cots
Children & pets (incl. fish tanks)	☒ Yes ☐ No	Remove pets; cover aquaria and switch off pumps; pyrethroids are highly toxic to cats, fish and bees
New / expectant mothers, young persons	☐ Yes ☐ No	Individual assessment; developmental effects only at maternally toxic doses

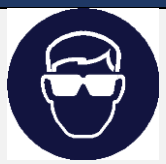
8. CONTROL MEASURES

Elimination / substitution	Use non-chemical methods first (proofing, hygiene, monitoring). Use pre-measured sachets or the doser to avoid open handling of granules.
Engineering controls	Mix in a well-ventilated area, outdoors or with exhaust ventilation where possible. Avoid dust formation.
Safe handling	Read the label. Add granules to part-filled sprayer, then top up, to avoid dust. Avoid breathing dust or spray. Keep away from heat and ignition sources; prevent static build-up when handling bulk powder.
Hygiene	Wash hands and face before breaks and after use. No eating, drinking or smoking. Keep work clothes separate; remove contaminated clothing immediately and clean before reuse.
Storage	Original container, tightly closed, in a dry, cool, ventilated, locked store away from sunlight, food, drink and animal feed.
Training / information	Operatives trained in biocide use (e.g. RSPH/BPCA level 2) and briefed on this assessment, the label and the SDS.

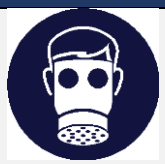
9. PERSONAL PROTECTIVE EQUIPMENT



Nitrile gloves



Goggles



FFP1 respirator (mixing / spraying)



Coveralls

PPE	Requirement (from SDS)	Standard / notes
Hand	Nitrile rubber gloves, > 0.4 mm, breakthrough > 480 min (Class 6)	EN 374. Wash when contaminated; discard if perforated
Eye / face	Goggles	EN 166, field of use 5 (dust)
Body	Standard coveralls and Category 3 Type 5 suit; higher protection if significant exposure	Cotton or polycotton overalls under suit, laundered frequently
Respiratory	Particle filter mask, protection factor 4	EN 149 FFP1 or equivalent; face-fit tested. Use the label's PPE for normal use

10. FIRST AID

General	Move out of the dangerous area. Remove contaminated clothing. Show the label or SDS to the doctor. Pyrethroid: do not treat as organophosphate or carbamate poisoning; atropine is contraindicated.
Inhalation	Move to fresh air, keep warm and at rest. Call a doctor or poison centre immediately.
Skin contact	Wash immediately with plenty of soap and cool water for at least 15 minutes (warm water can worsen tingling). Vitamin E oil or lotion may ease paraesthesia. Seek advice if symptoms persist.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes, including under the eyelids; remove contact lenses after 5 minutes. Seek medical attention if irritation persists.
Ingestion	Rinse mouth and give small sips of water. Do NOT induce vomiting. Seek medical advice immediately and show the label.

11. SPILLAGE, FIRE & DISPOSAL

Accidental release	Avoid creating dust; remove ignition sources; wear PPE. Sweep or vacuum up mechanically into a labelled, closed container. Keep out of drains and watercourses. If it reaches a river, call the Environment Agency on 0800 807060; if drains, inform the water company.
Fire	Water spray, alcohol-resistant foam, dry chemical or CO2. No high-volume water jet. Dangerous gases evolved in fire; firefighters need breathing apparatus. Contain run-off.
Waste disposal	Unused product: hazardous waste (EWC 02 01 08*) via licensed contractor. Triple-rinse small containers, add rinsings to the sprayer, then dispose of clean packaging as non-hazardous waste.

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: Bayer Environmental Science K-OTHRINE WG250 Safety Data Sheet, Version 9 / GB (17.08.2017). Read alongside the current SDS and product label, and review for site-specific conditions.