



SAFETY DATA SHEET

SILO[®] SMOKE

Date of Issue: 8 March 2021

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Permethrin (25:75) 135 g/kg and potassium chlorate 127 g/kg.
Recommended use: Smoke generator insecticide
Supplier: UPL New Zealand Limited
PO Box 51584, Pakuranga
Auckland
Phone 0800 100 325
Emergency telephone number: 0800 CHEM CALL (0800 243 622) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: 6.1D, 6.3B, 6.4A, 6.5A, 6.9B, 9.1A, 9.3C, 9.4A

Required identification Details: May be harmful if swallowed, inhaled or absorbed through the skin
May cause eye and mild skin irritation.
May cause respiratory sensitisation.
May cause neurological symptoms from oral exposure at high doses.
Very toxic to aquatic organisms.
Harmful to terrestrial vertebrates.
Very toxic to terrestrial invertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Potassium perchlorate	3811-04-9	12.7
Permethrin	52645-53-1	13.5
Other ingredients	(non-hazardous)	balance

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

Move person to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

Ingestion:

If swallowed rinse mouth with water and give water to drink. Immediately contact a doctor or the National Poisons Centre (0800 764 766)

Skin contact:

If skin contact occurs, remove contaminated clothing and

Eye contact:	wash with soap and water. If irritation occurs seek medical attention In case of contact, immediately flush eyes with copious quantities of water for at least 15 minutes. Seek medical advice.
Workplace facilities:	Ensure washing facilities are available

5. FIRE-FIGHTING MEASURES

Extinguishing media: Hazardous thermal (de)composition products:	Water fog, foam or dry agent. During a fire this product may release smoke, hazardous decomposition product and toxic fumes.
Protection of fire-fighters:	Wear self-contained breathing apparatus and structural fire fighter's uniform

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear suitable protective clothing and boots.
Environmental precautions:	Prevent spill from entering drains, sewers or any body of water.
Methods for cleaning up:	Contain and absorb with sand, earth or inert absorbent. Scoop or shovel into sealable containers for disposal in accordance with local and national regulations. Decontaminate area with soap and water. Rinse.

7. HANDLING AND STORAGE

Handling:	Avoid contact with skin and eyes. Avoid breathing vapour/mist. Use with adequate ventilation.
Storage:	Store in a cool dry well-ventilated area out of direct sunlight. Store in a locked room away from children, unauthorised persons, animals, food, feedstuffs, seed and fertilisers.
Packaging materials:	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Exposure Standards:	No occupational exposure standards have been established for the product or the other ingredients excluding permethrin. Permethrin → 10 mg/m ³ TWA for an 8 hour day/5 day working week
----------------------------	--

Engineering measures

Exposure control measures:	Ensure adequate ventilation. Use local exhaust ventilation or use while wearing a dust mask to avoid breathing vapour.
-----------------------------------	--

Personal Protective Equipment

Detail specifications for equipment:

Respiratory system:	If inhalation risk, use an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
----------------------------	---

Skin and body:

Hands:

Eyes:

General hygiene:

Impervious gloves
Safety glasses
Leave immediately after lighting smoke generators.
Thoroughly ventilate treated areas before re-occupying.

To be used strictly in accordance with label instructions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colour, Odour.	Off-white powder. Permethrin odour
pH:	Not available.
Vapour Pressure:	Not available.
Boiling Point:	Not available.
Flash Point:	67°C
Freezing/melting point:	Not available.
Solubility:	Practically insoluble.
Density:	Not applicable.
Information for flammable material:	Not available.
Viscosity:	
Octanol/water partition coefficient:	Not available.
Auto – ignition Temperature:	>130°C

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to avoid:	None anticipated.
Materials to avoid:	None known
Hazardous Decomposition Products:	During a fire this product may release smoke, hazardous decomposition products and toxic fumes.
Hazardous polymerization:	None.
Hazardous reactions:	Chloride compounds and nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral:	6.1D, may be harmful if swallowed
Acute toxicity – Dermal:	
Acute toxicity – Inhalation:	Of dust: May result in respiratory irritation Of Smoke/vapour: Irritant to mucous membranes and respiratory tract.
Skin irritation:	May cause skin irritation.
Eye irritation:	May cause eye irritation.
Chronic	Prolonged or repeated skin contact may lead to allergic dermatitis. Over-exposure may result in nausea, vomiting, diarrhea and in severe cases, central nervous system depression, leading to tremours, convulsions and coma. No other known health effects.
Other information:	No other known health effects

Information on Product:

<u>Acute:</u>	
Oral toxicity:	Not available
Dermal toxicity:	LD50 rat: >2000mg/kg
Inhalation toxicity:	LD50 rat: =2.3mg/L – 4 hours
Skin irritation:	Slight irritant.
Eye irritation:	Slight irritant.
Sensitisation:	A moderate skin sensitizer

Information Components:

<u>Acute:</u>	
Oral toxicity:	LD50 rat: >806mg/kg (Permethrin)

Dermal toxicity:	LD50 rat: >1870 mg/kg (Potassium chlorate)
Inhalation toxicity:	Not available.
Skin irritation:	Not available.
Eye irritation:	Not available.
Sensitisation:	Not available.

12. ECOLOGICAL INFORMATION

ECOTOXOCITY

Fish	Bluegill sunfish : LC ₅₀ : 1.8 µg/L (48 hours)
Daphnia Magna	Rainbow trout (Oncorhynchus mykiss) LC ₅₀ : 5.4 µg/L (48 hours) Water flea (Daphnia magna) LC ₅₀ : 0.6 µg/L (48 hours).
Algae	Not available
Bees	Permethrin is toxic to bees. Oral LD ₅₀ : 0.098 µg/bee Contact LD ₅₀ : 0.029 µg/bee
Bird toxicity	Permethrin is practically non-toxic to birds. Chicken: Oral LD ₅₀ : >3000 mg/kg Japanese quail: Dietary LD ₅₀ : >13500 mg/kg
Persistence/degradability Soil	Low soil mobility. High potential for bioaccumulation but is rapidly eliminated from fish (about 80% in 14 days). There is evidence of degradation in soil and water. The half-life in soil is less than 38 days.

13. DISPOSAL CONSIDERATIONS

Methods of disposal:	Waste must not enter waterways. Empty container scan be wrapped in paper and placed in waste bin.
-----------------------------	--

14. TRANSPORT INFORMATION - International transport regulations

International transport regulations:	Classified as Dangerous Goods for transport by sea and air according to the criteria of the UN Model Regulations for Transport of Dangerous Goods 13th Edition.
UN number:	UN3077
Class or Division:	9
Subsidiary Class:	
Packing Group:	III
Hazchem code:	2X
EPG	9C1
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN)

15. REGULATORY INFORMATION

ACVM Registered Number:	
HSNO Approval Code:	HSR100873

16. OTHER INFORMATION

Additional information:

Original Issue Date:

Revision Date: 8 March 2021

Replaces: ES465

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

This Safety Data Sheet is based on the most recent information available. To the extent permitted by law, users of this information accept that neither the manufacturer, UPL New Zealand Limited as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these information.

® Trademark of UPL New Zealand Ltd.