



## SAFETY DATA SHEET

Freezone Big Smoke Insecticide APVMA Approval No. 85393

### SECTION 1. IDENTIFICATION

Product name: Freezone Big Smoke Insecticide APVMA Approval No. 85393

Recommended Use: Agricultural insecticide for use as described on the product label.

Restrictions on Use: None specified.

Supplier of SDS: Freezone Public Health Pty Ltd

Supplier Address: 18 Gilpin Street  
Shorncliffe QLD 4017

Supplier Phone: 07 3869 4436

Supplier Fax: 07 3869 4433

Supplier Email: [info@freezone.net.au](mailto:info@freezone.net.au)

Emergency Telephone Number: Craig Jephcott 0412 200 252  
Poisons Information Centre 13 11 26

### SECTION 2. HAZARD(S) IDENTIFICATION

#### Classification of the substance or mixture

Acute toxicity: Category 4

Skin sensitisation: Category 1

Eye irritation: Category 2

Specific target organ toxicity - single exposure: Category 3

Acute aquatic toxicity: Category 1

Chronic aquatic toxicity: Category 1

**Signal Word** Warning

#### Label Elements and Precautionary Statements

Hazard Pictograms: Exclamation Mark Environment



Hazard Statements: H302 Harmful if swallowed.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 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/face protection.  
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.  
 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 nonhazardous waste. 2.3 Other hazards Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours). Ignites readily. Product burns without a flame to give a dense white harmful smoke.

### SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

<p><b>PERMETHRIN</b> contains 13.5%</p> <p>CAS number: 52645-53-1</p> <p>EC number: 258-067-9</p>	<p><b>Classification</b></p> <p>Acute Tox. 4, H332</p> <p>Acute Tox. 4, H302</p> <p>Skin Sens. 1, H317</p> <p>Aquatic Acute 1, H400</p> <p>Aquatic Chronic 1, H410</p>
<p><b>Potassium chlorate</b> contains &gt; 1.00% – &lt; 25.00%</p> <p>CAS number: 3811-04-9</p> <p>EC number: 223-289-7</p>	<p><b>Classification</b></p> <p>Ox. Sol. 1, H271</p> <p>Acute Tox. 4, H332</p> <p>Acute Tox. 4, H302</p> <p>Aquatic Chronic 2, H411</p>

Full text for all hazard statements is contained in Section 16.

**SECTION 4. FIRST AID MEASURES****First aid measures**

General information	Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move the victim to fresh air and keep at rest. Call a physician or poison control center immediately.
Ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.
Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.

**Most important symptoms and effects, both acute and delayed**

General information	Local:, Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing Systemic:, Discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Dizziness, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy
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**Indication of any immediate medical attention and special treatment needed**

Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
Treatment	Local treatment: Initial treatment: symptomatic. Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequela

**SECTION 5. FIREFIGHTING MEASURES****Extinguishing media**

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	High volume water jet

**Specific hazards arising from the chemical**

Specific hazards	Dangerous gases are evolved in the event of a fire., Contains potassium chlorate which is classified as an oxidising agent.
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### Special protective equipment and precautions for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Keep people away from and upwind of spill/leak. Avoid dust formation. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.
Environmental precautions	Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency
Clean up methods	The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Clean floors and contaminated objects with plenty of water.

Information regarding safe handling, see section 7  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13

## SECTION 7. HANDLING AND STORAGE

Precautions for handling	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Avoid dust formation. Ensure adequate ventilation.
Advice on protection	Dust may form explosive mixture in air. against fire and explosion.
Hygiene measures	When using, do not eat, drink or smoke. Remove soiled clothing immediately and clean thoroughly before using again. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Wash hands immediately after work, if necessary take a shower.
Storage precautions	Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Protect from freezing. Keep away from food, drink and animal feedingstuffs.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

## Control Parameters

Components	CAS-No.	Control parameters	Update	Basis
Permethrin	52645-53-1	10 mg/m <sup>3</sup> (TWA)		OES BCS*

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Personal protective equipment	In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.
Respiratory protection	Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Powder
Colour	White to light beige
Odour	Characteristic
Odour threshold	No information available.
Ignition temperature	> 130 °C
Melting point	No information available
Boiling point	No information available
Flash point	No information available
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Bulk density	ca. 940 kg/m <sup>3</sup> .
Water solubility	Partly soluble
Partition coefficient	No information available.

Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	Contains potassium chlorate which is classified as an oxidising agent.

## SECTION 10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Reactivity	Stable under recommended storage conditions
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Extremes of temperature and direct sunlight. Heat, flames and sparks.
Incompatible materials	Store only in the original container.
Hazardous decomposition	No decomposition products expected under normal conditions of use.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD50 (rat) ca. 2,000 mg/kg

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) ATE > 2,000 mg/kg  
ATE – acute toxicity estimate

#### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) LC50 (rat) > 4.2 mg/l  
Exposure time: 4 h  
Highest attainable concentration. Irritating to respiratory system.

#### Skin corrosion/irritation

Animal data No skin irritation (rabbit)

#### Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. (rabbit)

#### Sensitisation

Sensitising (guinea pig)  
Information given is based on data on the components and the toxicology of similar products

#### Assessment repeated dose toxicity

Permethrin did not cause specific target organ toxicity in experimental animal studies.

#### Assessment Mutagenicity

Permethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

#### Assessment Carcinogenicity

Permethrin caused at high dose levels an increased incidence of tumours in mice in the following organ(s): liver, Lungs. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under

normal use conditions.

#### Assessment toxicity to reproduction

Permethrin did not cause reproductive toxicity in a two-generation study in rats.

#### Assessment developmental toxicity

Permethrin did not cause developmental toxicity in rats and rabbits. Further information Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

### SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Poecilia reticulata (guppy)) 0.0076 mg/l Exposure time: 96 h. The value mentioned relates to the active ingredient permethrin.
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) 0.00017 mg/l Exposure time: 48 h. The value mentioned relates to the active ingredient permethrin.
Toxicity to aquatic plants	EC50 (Selenastrum capricornutum) 0.497 mg/l Exposure time: 96 h. The value mentioned relates to the active ingredient permethrin.
Persistence and degradability	not rapidly biodegradable
Partition coefficient	No information available.
Bioaccumulative potential	Bioconcentration factor (BCF) 300. Does not bioaccumulate.
Mobility in soil	Immobile in soil
Other adverse effects	No other effects to be mentioned.

### SECTION 13. DISPOSAL CONSIDERATIONS

General information	The generation of waste should be minimised or avoided wherever possible.
Disposal of packaging	Dispose of empty and cleaned packaging safely. Not completely emptied packagings should be disposed of as hazardous waste. Follow advice on product label and/or leaflet.

### SECTION 14. TRANSPORT INFORMATION

**\*Permethrin generators and packaging are subject to special provisions (ADR 375 / ICAO A197) and therefore neither Limited Quantity markings or any other markings are required)**

#### UN number

- UN No.: 3077

**UN proper shipping name**

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(PERMETHRIN MIXTURE)

**Transport hazard class(es)**

- Hazard Class: 9

**Packing group**

- Packing Group: III

**Environmental hazards**

- Yes

**Special precautions for user**

- Refer to sections 4 -8

**Transport in bulk according to Annex II of Marpol and the IBC Code**

- Not applicable

**Road/Rail (ADR/RID)**

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(PERMETHRIN MIXTURE)

- ADR UN No.: 3077

- ADR Hazard Class: 9

- ADR Packing Group: III

**Sea (IMDG)**

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(PERMETHRIN MIXTURE)

- IMDG UN No.: 3077

- IMDG Hazard Class: 9

- IMDG Pack Group.: III

**Air (ICAO/IATA)**

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(PERMETHRIN MIXTURE)

- ICAO UN No.: 3077

- ICAO Hazard Class: 9

ICAO Packing Group: III

**SECTION 15. REGULATORY INFORMATION**

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



**SECTION 16. OTHER INFORMATION**

Revision date	27/07/20
Revision	2
Supersedes date	01/08/2019
Complete hazard statements	H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H317 May cause an 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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.