

# Material Safety Data Sheet

Issue date: July 2004

Hazardous according to criteria of Worksafe Australia

## Pyrethrum SF Insecticide

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**COMPANY DETAILS:**

Kendon Chemical & MNFG. Co. Pty Ltd  
71 McClure Street  
Thornbury, Vic, 3071  
Phone: 03 9497 2822  
Fax: 03 9499 7225

**Product Name:** Pyrethrum SF Insecticide**Synonyms:** Concentrated pyrethrin / piperonyl butoxide based insecticide, water free.**Manufacturer's Product Code(s):****Use:** A liquid, quick acting solvent free liquid formulation of pyrethrum. The piperonyl butoxide ingredient is used to enhance the activity of the permethrin (synergist).**UN Number:** Not applicable**Proper Shipping Name:** Not applicable**Dangerous Goods Class:** Not applicable**Subsidiary risk:** Not applicable**Packing Group:** Not applicable**Hazchem Code:** Not applicable

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
PYRETHRUM	7.5%	8003-34-7
PIPERONYL BUTOXIDE	30%	51-03-6
POLYETHANOXY-9-NONYL PHENOL	remainder	9016-45-9

### 3. HAZARD IDENTIFICATION

Hazardous according to the criteria of Worksafe Australia

**Hazard Category: Harmful, Irritant**

**ACUTE HEALTH EFFECTS**

**Swallowed:**

Harmful if swallowed. May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach. Can cause nausea and vomiting.

**Eye:**

Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. Depending upon duration of exposure, eye damage may occur.

**Skin:**

Will cause irritation to the skin, with effects including; Redness, itchiness, and possible dermatitis.

**Inhaled:**

Mists may cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and possible confusion.

**Chronic:**

Prolonged or repeated skin contact may lead to dermatitis.

**4. FIRST AID MEASURES**

**Swallowed:**

If swallowed, DO NOT induce vomiting. Give a glass of milk or water. Seek medical assistance immediately. Transport to hospital or doctor.

**Eye:**

If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.

**Skin:**

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available. If irritation persists transport to hospital or doctor.

**Inhaled:**

Move victim to fresh air. Apply resuscitation if victim is not breathing. Open all doors, windows and/or vents.

**First Aid Facilities:**

Eye wash fountain, safety shower and normal wash room facilities nearby.

**Advice to Doctor:**

Treat symptomatically. Contact Poisons Information Centre 13 1126.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Water fog, foam, carbon dioxide, dry powder.

If safe to do so, move undamaged containers from fire area. Contain any fire water run-off.

**Flammability**

This material is a C2 Combustible Liquid to AS1940..

**Fire/Explosion Hazard:** Not an explosion hazard unless heated above 179°C (flash point for Piperonyl Butoxide).

**Hazardous Decomposition Products:** Decomposes on heating emitting soot, smoke, decomposition products and carbon monoxide. Fire Fighting Procedures Fire fighters to wear self-contained breathing apparatus (SCBA) if exposed to products of decomposition. Full protective clothing is also recommended.

## 6. ACCIDENTAL RELEASE MEASURES

**Spillage:** Ventilate the area. Remove all unnecessary personnel from spill area. Wear protective equipment. This is a C2 Combustible Liquid so ensure there are no heat sources nearby or mist formation near an ignition source. Slippery when spilt. Contain using absorbent, sand or soil - prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labelled containers for disposal.

## 7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidizing agents. Keep containers closed, when not using the product. Store in original packages as approved by manufacturer.

Classified as an AS1940 COMBUSTIBLE LIQUID C2 for storage and handling. Store in accordance with Dangerous Goods (Storage & Handling) Regulations and AS1940 Storage & Handling of Flammable & Combustible Liquids.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Standards

\*\*\*\*\*

#### **PYRETHRUM**

(Worksafe Australia)

5 mg/m<sup>3</sup> [TWA]

(American Conference of Govt. Industrial Hygienists)

5 mg/m<sup>3</sup> [TWA]

A4 - Not classifiable as a human carcinogen.

#### **PIPERONYL BUTOXIDE**

No Exposure Standard available

#### **POLYETHANOXY-9-NONYL PHENOL:**

No Exposure Standard available

### Engineering Controls

\*\*\*\*\*

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended. If heated or a mist is formed, control all ignition sources.

**Personal Protection Equipment**

\*\*\*\*\*

Avoid skin, eye and inhalation contact.

**CLOTHING:** PVC or natural rubber apron or splash suit.

**GLOVES:** PVC or natural rubber.

**EYES:** Chemical goggles, faceshield or safety glasses with side shields to protect eyes.

**RESPIRATORY PROTECTION:** Avoid breathing of vapours or mists. If natural or local exhaust ventilation is not adequate, select and use an organic vapour respirator in accordance with AS/NZS 1715/1716.

If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear brown viscous liquid
<b>Boiling Point</b>	>180°C
<b>Melting Point:</b>	<0°C
<b>Vapour Pressure:</b>	Low (<2mm Hg at 20°C)
<b>Specific Gravity:</b>	1.04
<b>Flash Point:</b>	179°C (Piperonyl Butoxide ingredient)
<b>Flammability Limits:</b>	Not Available
<b>Solubility:</b>	Able to form an emulsion with water. Soluble in organic solvents.

**10. STABILITY AND REACTIVITY**

Stable if kept in closed containers and under normal conditions of use.

**CONDITIONS TO AVOID:** Heat, flames, ignition sources and incompatibles. Avoid exposure to light.

**INCOMPATIBLE MATERIALS:** Strong alkalis, acids, oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Emits smoke and fumes when heated to decomposition. May form carbon monoxide

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Pyrethrum (as 100%):**

Acute Oral Toxicity LD<sub>50</sub> (rat) = 3500 mg/kg

Acute Skin Toxicity LD<sub>50</sub> (rabbit) = >19000 mg/kg

### **Piperonyl Butoxide (as 100%):**

Acute Oral Toxicity LD<sub>50</sub> (rat) = 6150 mg/kg

Acute Skin Toxicity LD<sub>50</sub> (rabbit) = 1880 mg/kg

## **12. ECOLOGICAL INFORMATION**

This substance is harmful to aquatic organisms. This substance may cause long term adverse effects in the aquatic environment. Avoid contaminating waterways.

Pyrethrins degrade quickly on exposure to sunlight and are not persistent in soil or water.

Piperonyl Butoxide is also degradable in soils and water and is basically immobile in most soils.

- Aquatic Toxicity: Fish LC50 (Carassius Auratus) : 4.2 mg/L

LC50 (Rainbow Trout) : 6.1 mg/L

- Aquatic Toxicity: LC50 (Daphnia Magna) : 2.95 mg/L after 24 hrs

## **13. DISPOSAL CONSIDERATIONS**

**Disposal:** In accordance with the Local, State & Federal EPA waste regulations.

Advise harmful, irritant and environmentally hazardous nature. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options.

The unclean container must also be handled as hazardous waste until cleaned.

## **14. TRANSPORT INFORMATION**

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) 6th Edition; or according to the UN, IACO(IATA) [by air] or IMO(IMDG) [by sea].

However, if transported in Australia by Road & Rail with FLAMMABLE LIQUIDS, Bulk COMBUSTIBLE LIQUIDS will be taken to be dangerous goods of Class 3; IF with Bulk FLAMMABLE LIQUIDS or with >1000L of Packaged FLAMMABLE LIQUIDS (please refer to Chapter 2, para 2.1.10 of the ADG Code 6th Edition).

## **15. REGULATORY INFORMATION**

**Workplace Hazardous Substance**

**HAZARD CATEGORY: HARMFUL, IRRITANT, ENVIRONMENT HAZARD**

## RISK PHRASES

- R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.  
R52 Harmful to aquatic organisms.  
R53 May cause long term adverse effects in the aquatic environment.

## SAFETY PHRASES

- S2 Keep out of reach of children.  
S13 Keep away from food, drink and animal feeding stuffs.  
S24/25 Avoid contact with skin and eyes.  
S37/39 Wear gloves and eye/face protection.  
S38 In case of insufficient ventilation, wear suitable respiratory protection.  
S26 After contact with eyes, rinse immediately with water and seek medical advice.  
S28 After contact with skin, wash immediately with soap and water.

### **Not a Dangerous Good.**

However, it is an AS1940 COMBUSTIBLE LIQUID, C2 (see Storage & Transport Sections for details).

### **Not a Scheduled Poison.**

**NICNAS - Aust. Inventory of Chemical Substances:** All ingredients are on the AICS.

## 16. OTHER INFORMATION

### **Contact Point**

Technical Department  
03 9497 2822

After Hours  
mobile: 0418-530-461

### **Disclaimer**

The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.

**Reviewers Initials / Yr / Mth: JS0002**