

## SAFETY DATA SHEET: Key Pyrethrum

### 1. IDENTIFICATION

<b>Product Name:</b>	Key Pyrethrum
<b>Other Names:</b>	Environmentally Hazardous Substance, Liquid, NOS (contains pyrethrum)
<b>Recommended Use:</b>	Insecticide
<b>Distributor:</b>	Key Industries Ltd
<b>Address:</b>	PO Box 65 070 Mairangi Bay, Auckland 0754
<b>Telephone:</b>	09 917 1791
<b>Emergency Phone:</b>	027 4941659
<b>National Poisons Centre:</b>	0800 764 766

### 2. HAZARDS IDENTIFICATION

<b>Hazard Classification:</b>	3.1D, 6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A, 9.4A
	Danger
	Combustible liquid.
	Causes mild skin irritation.
	May cause an allergic skin reaction.
	Causes serious eye irritation.

### 3. COMPOSITION: INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%w/w)
Hydrotreated Kerosene	64742-47-8	1.0 – 5.0
Natural Pyrethrum	8003-34-7	1.2 – 1.4
Emulsifier	Ethoxylated Proprietary	8.0 – 12.0
Piperonyl Butoxide	51-036	5.0 – 5.2

### 4. FIRST AID MEASURES

Consult the National Poisons Information Centre 0800 POISON (0800 764 766) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

<b>Swallowed:</b>	If swallowed, do not induce vomiting. If conscious and alert, rinse mouth and drink 1-2 cupfuls of water. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain medical attention.
<b>Skin Contact:</b>	Immediately wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes and other contaminated leather articles such as belts and watchbands. Apply Vitamin E cream for skin irritations. Seek medical attention for skin irritations.
<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Do NOT allow victim to rub eyes or keep eyes closed. Obtain urgent medical attention.
<b>Inhalation:</b>	Move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Obtain medical attention immediately
<b>First Aid facilities:</b>	Provide eye baths and safety showers close to areas where exposure may occur.
<b>Medical Attention:</b>	The decision to induce vomiting should be made by a physician because rapid absorption of this material can occur through the lungs after aspiration from vomiting. Gastric lavage may be indicated if ingested. Emesis should not be performed unless a near fatal dose of material has been ingested. Emesis and aspiration of the lungs may cause chemical pneumonia with hydrocarbon solvent present. Treat symptomatically. No known antidote. Do not confuse with cholinesterase poisoning. In all cases consult the National Poisons Centre for the most up to date treatment information.

### 5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.	
<b>Suitable extinguishing media:</b>	Fine spray, foam, dry chemical powder or carbon dioxide. Cool fire exposed container with water spray.
<b>Hazards from combustion products:</b>	Decomposition from combustion will emit acrid smoke and irritating fumes containing carbon oxides.
<b>Precautions for fire fighters and special protective equipment:</b>	Full protective clothing with chemical goggles, and self-contained breathing apparatus
<b>Hazchem Code:</b>	2X
<b>Flash Point:</b>	80°C

**EMERGENCY PHONE: KEY INDUSTRIES LTD (Frank Visser, Managing Director): 0274 941 659**

Date of Issue: 20th September 2013

Date of Revision: 20th September 2018

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### 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures:</b>	Eliminate sources of ignition. Prevent product from escaping to drains and waterways. Contain leaking packaging in a containment vessel or bunded area. Prevent any vapors or dust from building up in confined areas. Ensure that drain valves are closed at all times. Clean up minor spills immediately.
<b>Methods and materials for containment for a major spill:</b>	Eliminate sources of ignition. Warn occupants of downwind areas of possible hazards. Keep the public away from the area. Prevent product from entering sewers, watercourses, or low-lying areas. Shut off the source of the spill if safe to do so. Advise relevant authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation. Take measures to minimize the effect on the groundwater. If possible recover product using a pump paying attention to flammability hazards or absorbent material. Collect and seal in properly labeled containers for disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. In all instances due consideration must be given for First Aid Measures (Section 4), PPE requirements (Section 8), Stability and Reactivity (Section 10) for this material.

### 7. HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	Keep out of reach of children. This product is combustible with a moderate flashpoint. Avoid sources of ignition including smoking. Keep containers closed Use only in well-ventilated areas. When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before reuse.
<b>Conditions for safe storage:</b>	Store in a cool, dry place away from direct sunlight. Keep away from heat and ignition sources. Store in original containers. Protect from physical damage to prevent accidental release. Do not store with food, feedstuffs, fertilizers and seeds.
<b>Incompatible materials:</b>	None Known

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Limits:</b>	Pyrethrum; ACGIH 5 mg/m <sup>3</sup> . Hydrotreated Kerosene: ACGIH 525 mg/m <sup>3</sup> (TWA). No WES TEL or EEL has been set by ERMA for this product.
<b>Engineering Controls:</b>	The use of local exhaust ventilation is recommended to control process emissions near the source. Sufficient ventilation should be provided to keep the solvent in air concentrations below any relevant exposure limit. Provide mechanical ventilation of confined spaces. Explosion proof electrical equipment is not required but is recommended.
<b>Hygiene Controls:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility, safety shower and facility for washing hands/face after work.
<b>Personal Protective Equipment:</b>	<b>Respiratory Protection:</b> When handling this material it is recommended to use an approved respirator or half face mask complying with OSH and other relevant standards
	<b>Eye protection:</b> Always use safety glasses or a chemical goggles when handling this product. Contact lenses may absorb and concentrate irritants, glasses are recommended.
	<b>Skin/ Body Protection:</b> Always wear long sleeves and long trousers or coveralls, and enclosed footwear of safety boots when handling this product. It is recommended that chemical resistant gloves (eg nitrile, neoprene) be worn when handling this product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Slightly opaque pale yellow liquid
<b>Boiling Point (°C):</b>	No data available
<b>Melting Point(°C):</b>	No data available
<b>Flash Point(°C):</b>	80
<b>SG/ Density, 20°C (g/mL):</b>	1.1
<b>Vapour Pressure, 20°C (kPa):</b>	1.1
<b>Alkalinity/ acidity as pH:</b>	No data available
<b>Solubility in water:</b>	Not applicable
The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult Key Industries.	

### 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable at room temperature and pressure.
<b>Hazardous decomposition products:</b>	Decomposition from combustion will emit acrid smoke and toxic fumes containing carbon oxides, nitrogen oxides, hydrogen bromide and hydrogen cyanide.
<b>Specific Materials to Avoid:</b>	Strong acids, alkalis, oxidising agents, reducing agents and heat.
<b>Hazardous Polymerisation:</b>	Not known to occur.

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### 11. TOXICOLOGICAL INFORMATION

<b>Acute Effects</b>	<b>Ingestion:</b>	Low toxicity if swallowed. Can cause stomach irritation, resulting in nausea, cramps and vomiting. Excessive ingestion can cause nervous system disorders, such as fatigue, dizziness, headaches, lack of coordination, tremors and unconsciousness. Aspiration of the lungs can occur during vomiting leading to chemical pneumonitis.
	<b>Eye Contact:</b>	The liquid is irritating to the eyes and may result in corneal injury. Avoid eye contact
	<b>Skin Contact:</b>	Prolonged contact with the skin, especially the face, may result in irritation or burning sensations (parasthesia) followed by numbing which may persist for a few hours
	<b>Inhalation:</b>	The vapor/mist is discomforting to the upper respiratory tract and lungs. Acute effects from inhalation of high vapor concentrations or mists may cause effects similar to that of ingestion.
<b>Chronic Effects:</b>		Repeated inhalation or skin contact may cause sensitization. Prolonged or repeated skin contact may cause irritation and possible dermatitis. Persons with pre-existing conditions are advised to limit or avoid product contact.
<b>Other Health Effects Information:</b>		Not Available
<b>Toxicological Information:</b>		Oral LD50: 500 mg/kg (rat) pyrethrum; >10,000 mg/kg formulated product (estimated) Inhalation LC50: 3.4 mg/L (rat) pyrethrum; >250 mg/L formulated product (estimated)

### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	This product is harmful to the environment, with the potential to result in irreparable and irreversible effects. See hazard classifications in section 15 of this document.
<b>Persistence/ Biodegradability:</b>	log P: 4.6. This product is expected to have moderate persistence in the environment with a soil half life 8-12 days, neutral pH water half life 35 day but is potentially bioaccumulative.
<b>Mobility:</b>	This product is likely to have low mobility in the environment and low leaching potential.
<b>Aquatic Toxicity:</b>	Fish toxicity LC50: 0.0018 mg/L pyrethrum; 0.14 mg/kg formulated product (estimated) Daphnia Magna EC50: 0.0067 mg/L pyrethrum; 0.49 mg/kg formulated product (estimated) Green algae: >100 mg/kg formulated product (estimated)

### 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal:</b>	Dispose of product only by using according to label or using an approved waste disposal contractor. If this material as supplied becomes a waste care should be taken to ensure compliance with national and local authorities. It is the responsibility of the waste generator to determine the toxicity and physical properties of the waste generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Do not dispose of via municipal sewers, drains, natural streams or rivers.
<b>Packaging Disposal:</b>	Triple rinse container and add rinsate to the spray tank. Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain product residue that may be harmful. Incinerate via approved incinerators or crush and bury in an approved landfill. Ensure that empty packaging is managed in accordance with Dangerous Goods and HSNO regulations.

### 14. TRANSPORT INFORMATION

<b>UN No:</b>	UN3082
<b>Proper Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (contains Pyrethrum)
<b>DG Class:</b>	9
<b>Subsidiary Risk:</b>	
<b>Packing Group:</b>	III
<b>Hazchem Code:</b>	2X
<b>Dangerous Goods Segregation:</b> This product is classified as Dangerous Goods by Road and Rail. Please consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:1999 Transport of Dangerous Goods on Land for further information.	

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### 15. REGULATORY INFORMATION

<b>Country / Region:</b>	New Zealand
<b>ACVM Approval Number:</b>	Not applicable
<b>ERMA Approval Number:</b>	HSR000291
<b>HSNO Classifications:</b>	3.1D: Flammable Liquid, 6.3B: Skin Irritant, 6.4A: Eye Irritant, 6.5A: Sensitiser (Respiratory), 6.5B: Sensitiser (Contact), 6.9A: Target Organ Toxicant, 9.1A: Aquatic Ecotoxicant, 9.4A: Ecotoxicant Terrestrial Invertebrate
<b>HSNO Controls:</b>	<p>Trigger Quantities for this Material:</p> <ul style="list-style-type: none"> <li>• Approved Handler Test Certificate: Any quantity (when applied)</li> <li>• Location/Transit Depot Certificate: Not Required</li> <li>• Hazardous Atmosphere Zone: Not Required</li> <li>• Signage: 100 L</li> <li>• Emergency Plan, Secondary Containment: 100L</li> <li>• Tracking: Not required</li> </ul> <p>The trigger quantities above must take into account any other hazardous substance that is present at that location. This represents a partial list of the controls for this material. Contact Key Industries Ltd a full list of HSNO controls.</p>

### 16. OTHER INFORMATION

<b>Reasons for Issue:</b>	Update format and content to comply with legislation
<b>Abbreviations:</b>	<p>TWA - the highest allowable exposure concentration in an eight-hour day for a five-day working week</p> <p>STEL - maximum allowable exposure concentration at any time</p> <p>CAS Number: Chemical Abstracts Number</p> <p>ERMA: Environmental Risk Management Authority</p> <p>HSNO: Hazardous Substances and New Organisms</p>
<b>References:</b>	<ul style="list-style-type: none"> <li>• Supplier Safety Data Sheets</li> <li>• Hazardous Substances Databank</li> <li>• ERMA Chemical Classification Information Database</li> <li>• FOOTPRINT Pesticides Database</li> <li>• Sax's Dangerous Properties of Industrial Materials, 11th Ed, 2007</li> <li>• Synapse Chemlib Handbook of Solvents</li> </ul>

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the supplier's knowledge. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Key Industries Limited.