

SAFETY DATA SHEET

Revision Date: 22-Mar-2019

Version: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Recommended use of the chemical and restrictions on use:Recommended Use:An Insecticide for Organic Crop Protection.		
Details of the supplier of the safety data sheet		
Emergency telephone numbers: 24 Hour TRANSPORTATION Emergency: CHEMTREC®: (800) 424-9300 International: (703) 527-3887		
T. ay to		

2. HAZARDS IDENTIFICATION

Classification:

OSHA Regulatory Status:

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1

Label elements

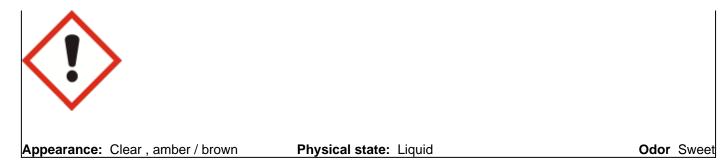
Emergency Overview

WARNING

Hazard statements

H332 - Harmful if inhaled

H317 - May cause an allergic skin reaction



Precautionary Statements - Prevention:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves

Precautionary Statements - Response:

P321 - Specific treatment (see Section 4/ First Aid).
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 - Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage:

P404 - Store in a closed container

Precautionary Statements - Disposal:

P501 - Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC):

Not applicable

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Pyrethrins	8003-34-7	5.00

*The exact percentage (concentration) of composition has been withheld as a trade secret

Comments: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Aspiration pneumonia hazard: • Not applicable

Description of first aid measures:

Eye contact:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for

	15-20 minutes. Call a poison control centeror doctor for treatment advice.
Ingestion:	If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or a doctor. Never give anything by mouth to an unconscious person.
Inhalation:	Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Self-protection of the First Responder:	Use personal protective equipment as required.
Note to physicians:	
	For skin effects, a highly efficient therapeutic agent for Pyrethrin/ Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

Caution: Use of water spray when fighting fire may be inefficient.

Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO2).

Specific hazards arising from the chemical

No information available.

Explosion data Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions:	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions:	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up:Pick up and transfer to properly labeled containers. Cover liquid spill with sand,
earth or other non-combustible absorbent material. Cover powder spill with plastic
sheet or tarp to minimize spreading. Dam up. Soak up with inert absorbent

material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. For more information, see product label.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. For more information, see product label.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Supplier OEL
Pyrethrins	TWA: 5 mg/m ³	TWA: 5 mg/m ³	IDLH: 5000 mg/m ³	-
8003-34-7	_	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³	

NIOSH IDLH

Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls:	Safety showers
	Eyewash stations
	Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection:	Protective eyewear is recommended, but is not required.	
Skin and body protection:	Wear protective gloves and protective clothing.	
Respiratory protection:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.	
General Hygiene Considerations:	When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical state:	Liquid
Appearance:	Clear, amber / brown
Odor	Sweet

Odor threshold: Color (Gardner Scale):	No information available No information available	
<u>Property:</u> pH: Melting point / freezing point: Boiling point / boiling range: Flash point:	<u>Values:</u> 5.9 No information available No information available > 93.3 °C / > 200.0 °F	Comment: • Method @ 5% in H ₂ O
Evaporation rate: Flammability (solid, gas): Upper flammability limit (UEL): Lower flammability limit (LEL):	No information available No information available No information available No information available	
Vapor pressure: Vapor density: Specific Gravity: Water solubility: Partition coefficient; n-Octanol/	No information available No information available No information available No information available No information available	
Water: Autoignition temperature: Decomposition temperature: Kinematic viscosity: Dynamic viscosity: Refractive Index:	No information available No information available No information available 34.8 cPs No information available	@ 24.0 °C
Other Information: Density: VOC Content (%):	0.932 g/cm ³ @ 20.0 °C 0%	
<u>Miscibility/ Solubility:</u> Water:	Partially miscible	

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials:

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Numerical measures of toxicity - Product Information

Oral LD₅₀	>2,000 mg/kg (rat)
Dermal LD₅₀	>2,000 mg/kg (rabbit)
Inhalation LC₅₀	>2.12 mg/L, (rat; 4 hours)
Eye contact:	Irritation clearing in 48 hours. (rabbit).
Skin Contact:	Slight irritation at 72 hours. (rabbit).
Skin Irritation Index:	1.3
Sensitization:	Positive. (guinea pig).
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity:	No information available.
Developmental Toxicity	No information available.
Teratogenicity:	No information available.
STOT - single exposure:	No information available.
STOT - repeated exposure:	No information available.
Chronic toxicity:	Avoid repeated exposure.
Target Organ Effects:	Central nervous system, Respiratory system, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects: No information available

Environmental hazards (EPA):

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Disposal of wastes:	Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.
Contaminated packaging:	For more information, see product label.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

UN/ID Number: UN3082

Proper Shipping Name: Hazard Class: Packing Group:	Environmentally hazardous substance, liquid, n.o.s., RQ (Pyrethrins) 9 III	
Other DOT Shipping Information:	This material is not regulated as a hazardous material by the DOT in quantities less than 20 Lbs. per shipping unit.	
	Shipping name for quantities less than 20 Lbs. per shipping unit:	
	Insecticides, Insect or Animal Repellent, Liquid Hazard Class:This material is not hazardous.	
Air (IATA/ ICAO)		
UN/ID Number: Proper Shipping Name: Hazard Class: Packing Group:	UN3082 Environmentally hazardous substance, liquid, n.o.s., RQ (Pyrethrins) 9 III	
Other IATA / ICAO Shipping Information:	This material is not regulated as a hazardous material by IATA / ICAO in quantities less than 20 Lbs. per shipping unit.	
	Shipping name for quantities less than 20 Lbs. per shipping unit:	
	Insecticides, Insect or Animal Repellent, Liquid Hazard Class:This material is not hazardous.	
<u>Vessel (IMO/ IMDG)</u>		
UN/ID Number: Proper Shipping Name: Hazard Class: Packing Group:	UN3082 Environmentally hazardous substance, liquid, n.o.s., RQ (Pyrethrins) 9 III	
Other IMO / IMDG Shipping Information:	This material is not regulated as a hazardous material by IMO / IMDG in quantities less than 20.0 Lbs. per shipping unit.	
	Shipping name for quantities less than 20.0 Lbs. per shipping unit:	
	Insecticides, Insect or Animal Repellent, Liquid Hazard Class: This material is not hazardous.	

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 HazardCategoriesAcute health hazardChronic Health HazardYesFire hazardNo

Sudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable	CWA - Toxic	CWA - Priority	CWA - Hazardous
	Quantities	Pollutants	Pollutants	Substances
Pyrethrins 8003-34-7	1 lb	-	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ):
Pyrethrins 8003-34-7	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations:

California Proposition 65:

This product does not contain any intentionally added Proposition 65 chemicals

U.S. EPA Label Information:

EPA Registration Number: 1021-2560

Difference between SDS and EPA (FIFRA) Pesticide label:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for Safety Data Sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:

Signal word: CAUTION

Precautionary Statements:

- Causes moderate eye irritation.
- Harmful if swallowed.
- Harmful if absorbed through the skin.
- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

International Inventories:

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION.

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties
<u>HMIS</u>	Health hazards 2*	Flammability 1	Physical hazards 0	- Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Issue Date: 22-Mar-2019	Revision Date: 22-Mar-2019	Revision Note: - SDS sections updated - 4 - 5 - 8 - 14 - 15 - 16
SDS Prepared By: e-Mail Address:	Troy Azziv mgk-sds@	itto, MGK® Chemistry Department. emgk.com
Disclaimer:	and believ extent con extend no to the accu the extent or affiliates without inf particular o it is the use their own p that you ha This Safety REPLACE and accom safety, and responder generally o Safety Act	hation provided in this Safety Data Sheet (SDS) is provided in good faith ed to be accurate at the time of preparation of the SDS. However, to the sistent with applicable law, MGK® and its subsidiaries or affiliates warranties, make no representations, and assume no responsibility as uracy, suitability, or completeness of such information. Additionally, to consistent with applicable law, neither MGK® nor any of its subsidiaries a represents or guarantees that this information or product may be used ringing the intellectual property rights of others. Except to the extent a use and particular information are expressly stated on the product label, ers' own responsibility to determine the suitability of this information for particular use of this product. If necessary, contact MGK® to confirm ave the most current product label and SDS. y Data Sheet (SDS) serves different purposes than and DOES NOT OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to npanying the product container). This SDS provides important health, d environmental information for employers, employees, emergency s and others handling large quantities of the product in activities other than product use as required by the Occupational Health and (29 CFR 1910.1200, "Hazcom"). The product label provides information of product use in the ordinary course. Use, storage and disposal of

pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

End of Safety Data Sheet.