

MATERIAL SAFETY DATA SHEET



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Revision No: 5

PyGanic® Crop Protection EC 1.4 ii

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PyGanic® Crop Protection EC 1.4 ii
PRODUCT DESCRIPTION: An Insecticide for Organic Crop Protection
PRODUCT CODE: 007443, EPA REG. NO. : 1021-1771

MANUFACTURER

McLaughlin Gormley King Company
 8810 10th Avenue North
 Minneapolis, MN 55427
Product Stewardship: (763) 544-0341
Customer Service: (800) 645-6466

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC U.S. and CANADA: (800) 424-9300
CHEMTREC All Other Areas: (703) 527-3887
Emergency Phone: (888) 740-8712

COMMENTS: MGK® Hours of operation are 8:00 am to 4:30 pm CST, 14:00 to 22:30 GMT.

For information regarding MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call the INTERNATIONAL POISON CENTER 24 hours a day at 1-888-740-8712 .

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>	<u>EINECS#</u>
Pyrethrins	1.4	008003-34-7	232-319-8

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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUTION. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Applicators and other handlers must wear a long-sleeved shirt and long-pants, chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber or Viton, shoes and socks.

POTENTIAL HEALTH EFFECTS

EYES: Causes temporary irritation, tearing, and blurred vision.

SKIN: Can cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth). Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: Harmful if swallowed.

INHALATION: Excessive inhalation may be irritating to the respiratory tract.

CHRONIC: None known.

COMMENTS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

4. FIRST AID MEASURES

EYES: 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: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: If swallowed, call a poison control center or doctor immediately 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.

NOTES TO PHYSICIAN: For skin effects, a highly efficient therapeutic agent for pyrethrin exposure is topical application of tocopherol acetate (Vitamin E).

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: > 93.3°C (200°F)TAG Closed Cup

FLAMMABLE CLASS: This product is NOT classified as flammable or combustible by OSHA.

EXTINGUISHING MEDIA: Foam, carbon dioxide or dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions this product may support combustion and may decompose to give off toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

FIRE FIGHTING PROCEDURES: Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent such as sand, or vermiculite. Clean spill area of residues and absorbent.

LARGE SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, storage tanks, etc., via drains, pumps, etc. Absorb with appropriate absorbent such as sand or vermiculite. Clean spill area of residues and absorbent.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Contains Pyrethrins, which are toxic to fish and other aquatic invertebrates. Contaminated absorbent and wash water should be disposed of according to local, state, and federal regulations.

GENERAL PROCEDURES: Contaminated absorbent and wash water should be disposed of according to local state/provincial and federal/national regulations.

7. HANDLING AND STORAGE

HANDLING: Wear chemically impervious gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton. Wear a long-sleeved shirt, long pants, shoes and socks. Mechanical ventilation should be used when handling this product in enclosed spaces. Wearing a respirator is not normally required when handling this product, but recommended in the absence of proper mechanical ventilation. Do not contaminate water, food or feedstuffs by storage, handling, or disposal.

READ AND OBSERVE ALL PRECAUTIONS AND INSTRUCTIONS ON THE LABEL.

STORAGE: Store in a cool, dry place. Keep container closed.

KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>	
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Pyrethrins	TWA		5	5		

ENGINEERING CONTROLS: Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Take prudent precautions to avoid contact with eyes.

SKIN: Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber or Viton, and wear protective clothing.

RESPIRATORY: Wearing a respirator is not normally required when handling this product. Use in well ventilated areas. Take prudent precautions to avoid breathing vapors and/ or spray mists of this product.

PROTECTIVE CLOTHING: Wear chemically-resistant gloves, shoes and socks, long pants, and a long-sleeved shirt.

WORK HYGIENIC PRACTICES: DO NOT SMOKE, EAT, OR DRINK, OR APPLY COSMETICS IN WORK AREA!

Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking, or using the toilet.

OTHER USE PRECAUTIONS: AGRICULTURAL USE REQUIREMENTS:

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE), and restricted-entry interval. The requirements listed below only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls; Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks.

COMMENTS: NON-AGRICULTURAL USE REQUIREMENTS:

The requirements in this section apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Eye protection, gloves, a long-sleeved shirt and long-pants are recommended.

Allow spray to dry before allowing adults, children, or pets on treated areas.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Sweet surfactant odor.

APPEARANCE: Clear, amber-brown colored liquid.

pH: 6.45@ 5% in water.

VAPOR PRESSURE: Not Available

VAPOR DENSITY: Heavier than air.

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: Not Available

SOLUBILITY IN WATER: Partially miscible in water.

DENSITY: Not Available

SPECIFIC GRAVITY: 0.922 (Water = 1) Hydrometer @ 20°C (68°F)

VISCOSITY: 23.7CPS at 24°C (75.2°F) Brookfield

MOLECULAR WEIGHT: Not Available

(VOC): <1 %

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Not compatible with strong acids or bases. Not compatible with strong oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: >2000 mg/kg

Albino rabbit.

ORAL LD₅₀: >2000 mg/kg

Albino rat.

INHALATION LC₅₀: The Acute Inhalation LC₅₀ of this material places it in EPA Toxic Category IV.

EYE EFFECTS: Conjunctival irritation clearing in 72 hours.

SKIN EFFECTS: Slight irritation at 72 hours. Irritation Index = 1.58

SENSITIZATION: Positive

COMMENTS: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Carcinogenicity/ Oncogenicity-Pyrethrum has been tested in chronic feeding studies in mice and rats. Slightly elevated incidences of benign tumors of the thyroid and liver were seen in rats following high doses of Pyrethrum. Further detailed scientific studies into the mechanism causing these responses indicate that these effects in the animals only occur at doses greatly exceeding the likely human exposure levels. Thus, the effects seen in animals are of little relevance to humans.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Environmental data not available for this product.

ECOTOXICOLOGICAL INFORMATION: This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate

water when disposing of equipment washwaters.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

EMPTY CONTAINER: Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and Local procedures.

RCRA/EPA WASTE INFORMATION: This product contains the following RCRA/CERCLA Hazardous wastes/substances:

Component, RCRA ID#, Cercla RQ

Pyrethrins, N/A, 1 Lb.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, N.O.S. RQ(Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3082

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1 Lb.

OTHER SHIPPING INFORMATION: This material is not regulated as a hazardous material by the DOT in quantities less than 71 Lbs.

Shipping name for quantities less than 71 Lbs. : Insecticides, Insect or Animal Repellents, Liquid, N.O.S.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, N.O.S. RQ(Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3082

PACKING GROUP: III

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Not Available

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: NO **PRESSURE GENERATING:** NO **REACTIVITY:** NO **ACUTE:** YES

313 REPORTABLE INGREDIENTS: This product contains no SARA Title III Section 313 chemicals that exceed the reporting limits.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: There are no SARA Title III Section 302 extremely hazardous substances present in this formulation. (40 CFR 355).

See Section 13 of this MSDS for the components that are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4).

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All chemical substances found in this product comply with the Toxic Substances Control Act's inventory reporting requirements.

**STATE REGULATIONS
VOLATILE ORGANIC COMPOUNDS (VOC):**

This product contains less than 1% VOC's.

16. OTHER INFORMATION

REVISION SUMMARY Revision #: 5 This MSDS replaces the April 15, 2004 MSDS. Any changes in information are as follows: In Section 1 [] Print CHEMTREC Phone Number Section 1 Footnotes MSDS Classification 24 Hour Emergency Phone Numbers In Section 2 Potential Health Effects - Skin Potential Health Effects - Skin Absorption Potential Health Effects - Ingestion In Section 7 Handling In Section 8 Skin Protection Eyes-Face Protection Other Use Precautions Section 8 Footnotes

HMIS RATING

HEALTH:		2
FLAMMABILITY:		1
PHYSICAL HAZARD:		1
PERSONAL PROTECTION:		

HMIS RATINGS NOTES: We assign HMIS ratings to this product based on the hazards of its ingredients(s). Since the customer is most aware of the applications and conditions of use, he or she must ensure that the proper Personal Protective Equipment is provided, consistent with the information contained in Section's 7 and 8 of this MSDS.

COMMENTS: The data contained herein are based on information currently available to McLaughlin Gormley King Company and, to the best of our knowledge, are accurate and based on sound expert opinion. Our statements herein, however, are not to be taken as a warranty or representation for which McLaughlin Gormley King Company assumes legal responsibility.

MSDS Prepared by T. Azzivitto