

MATERIAL SAFETY DATA SHEET



McLaughlin Gormley King Company

PRODUCT CODE:

007443, PyGanic® Crop Protection EC 1.4 ii (CANADA)

CANADA

Page: 1 of 7

Revision Date: 6/30/2011

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT CODE: 007443
PRODUCT NAME: PyGanic® Crop Protection EC 1.4 ii
REGISTRATION NUMBER: 30164 Pest Control Products Act
PRODUCT DESCRIPTION: An Insecticide for Organic Crop Protection
SYNONYMS: Py, Pyrethrum, Pyrethrins,
MANUFACTURER: McLaughlin Gormley King Company, 8810 Tenth Avenue North, Minneapolis MN. 55427
TELEPHONE M-F, 8:00-4:30 CST, 14:00-22:30 GMT: (800) 645-6466 or (763) 544-0341
MSDS & Product Information, 8:00-4:30 CST, 14:00-22:30 GMT: (800) 645-6466 or (763) 544-0341

24 HOUR EMERGENCY PHONE (CHEMTREC®) U.S. and CANADA:	(800)-424-9300	CHEMTREC® (ALL OTHER AREAS):	(703) 527-3887
---	----------------	---	----------------

For **MEDICAL EMERGENCIES** or **PESTICIDE INCIDENTS**, call 24 hours a day to **1-888-740-8712**, or **1-952-852-9509** from outside of the U.S.A.

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

CAUTION - POTENTIAL SKIN SENSITIZER. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product. This pesticide may cause skin sensitization reactions in certain individuals.

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

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

EYES: May cause 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). This pesticide may cause skin sensitization reactions in certain individuals.

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: Harmful if swallowed.

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

CHRONIC EFFECTS: None known

ECOLOGICAL: See Section's 12 and 15.

TOXICOLOGICAL: See Section 11.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT(S)	CAS #	EINECS	EXPOSURE LIMITS	% BY WT.
Pyrethrins [Botanical Insecticide composed of the six constituents of Pyrethrum (Pyrethrin I, Pyrethrin II, Cinerin I, Cinerin II, Jasmolin I and Jasmolin II)]	8003-34-7	232-319-8	5 mg/m ³ (OSHA, ACGIH)	1.4

PEL = Permissible Exposure Limits.

TLV = Threshold Limit Value.

TWA = Time Weighted Average (8 hr).

STEL = Short Term Exposure Limit (15 min.).

COMMENTS: Values are not product specifications.

CHEMTREC® (TRANSPORTATION): (800)-424-9300

MEDICAL EMERGENCIES: 1-888-740-8712

MATERIAL SAFETY DATA SHEET

MGK[®]

McLaughlin Gormley King Company

PRODUCT CODE: 007443, PyGanic[®] Crop Protection EC 1.4i (CANADA)

CANADA

Page: 2 of 7

Revision Date: 6/30/2011

4. FIRST AID MEASURES

FIRST AID PROCEDURES:

IF IN 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 centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: For skin effects, a highly efficient therapeutic agent for Pyrethrin exposure is topical application of Tocopherol Acetate (Vitamin E).

Symptoms: Hyper stimulation of neurotransmissions via sodium channel blocking. People with allergies or patients with asthma, including children, may notice particular sensitivity.

Symptoms of the central nervous system may include: tremors, convulsions, ataxia, irritation of the airways: rhinorrhea, cough, bronchospasm and dyspnea; allergic reactions may trigger: anaphylaxes, hyperthermia, sweating, skin edema, peripheral vascular collapse.

Therapy: Treat symptomatically. Give artificial resuscitation, if needed. Consult a poison control centre.

WARNING: Consult a poison control centre or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: >93.3 °C / > 200 °F **METHOD:** TAG Closed Cup.

This product is NOT classified as a combustible or flammable liquid by OSHA.

FLAMMABLE LIMITS:

LOWER FLAMMABLE LIMIT: not established.

UPPER FLAMMABLE LIMIT: not established.

AUTOIGNITION TEMPERATURE: not established.

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.

EXTINGUISHING MEDIA: Foam, carbon dioxide, or dry chemical.

FIRE FIGHTING INSTRUCTIONS: 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. Contain the run-off, if possible, for proper disposal.

CHEMTREC[®] (TRANSPORTATION): (800)-424-9300

MEDICAL EMERGENCIES: 1-888-740-8712

MATERIAL SAFETY DATA SHEET



McLaughlin Gormley King Company

PRODUCT CODE: 007443, PyGanic® Crop Protection EC 1.4i (CANADA)

CANADA

Page: 3 of 7

Revision Date: 6/30/2011

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. 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, etc. via drains, pumps, etc. Absorb with appropriate absorbent. Clean spill area of residues and absorbent
- WASTE DISPOSAL METHOD:** 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.

7. HANDLING AND STORAGE

- HANDLING:** Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton. Wear a long-sleeved shirt and long-pants, shoes and socks. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product. Mechanical ventilation should be used when handling this product in enclosed spaces. Wearing a respirator is not required when handling this product, however it is recommended in the presence of vapors or mists of this product, or 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:** PESTICIDE STORAGE - COMMERCIAL USE: Store in a cool, dry area, under lock and key. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, feed, seed, fertilizers, and veterinary supplies. Place formulations on lower-shelves, and dry formulations above.
- PESTICIDE STORAGE - RESIDENTIAL USE: Store in a cool, dry area. Always store pesticides in the original container. Store away from food and pet-food.
- KEEP OUT OF REACH OF CHILDREN.**
- WORK HYGIENIC PRACTICES:** DO NOT SMOKE, EAT, 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 and using the toilet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMITS:** Not established by OSHA or ACGIH (see Section 2 for individual components).
- ENGINEERING CONTROLS:** Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.
- RESPIRATORY PROTECTION:** Not normally required. Use in well ventilated areas.
- SKIN PROTECTION:** Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton. Wear a long-sleeved shirt and long-pants, shoes and socks.
- EYE PROTECTION:** Take prudent precautions to avoid contact with eyes.

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

CHEMTREC® (TRANSPORTATION): (800)-424-9300 **MEDICAL EMERGENCIES:** 1-888-740-8712

MATERIAL SAFETY DATA SHEET



McLaughlin Gormley King Company

PRODUCT CODE: 007443, PyGanic® Crop Protection EC 1.4i(CANADA)

CANADA

Page: 4 of 7

Revision Date: 6/30/2011

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.

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

APPEARANCE:	Clear, amber-brown colored liquid.
ODOR:	Sweet surfactant odor.
PHYSICAL STATE:	Liquid
FLASH POINT:	>93.3 °C / >200 °F METHOD: TAG Closed Cup
VAPOR PRESSURE:	Not determined.
VOC:	< 1%
VAPOR DENSITY:	Heavier than air.
FREEZING POINT:	Not determined.
SOLUBILITY IN WATER:	Partially miscible in water.
SPECIFIC GRAVITY:	0.922 (Water = 1) at 20°C (68°F)
pH:	6.45 @ 5% in water.
VISCOSITY:	23.7 CPS at 24°C (75.2°F) Brookfield

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable.
INCOMPATIBILITY:	Strong acidic or alkaline materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	Not applicable.
HAZARDOUS POLYMERIZATION:	Will not occur

MATERIAL SAFETY DATA SHEET

MGK[®]

McLaughlin Gormley King Company

PRODUCT CODE: 007443, PyGanic[®] Crop Protection EC 1.4i (CANADA)

CANADA

Page: 5 of 7

Revision Date: 6/30/2011

11. TOXICOLOGICAL INFORMATION

ACUTE STUDIES:

INGESTION:

Acute Oral LD₅₀ (rat) >2,000 mg/kg

SKIN:

Acute Dermal LD₅₀ (rabbit) >2,000 mg/kg

Primary skin irritation (rabbit): Slight irritation at 72 hours. Irritation Index = 1.58

Dermal Sensitization (guinea pig): Positive.

INHALATION:

Acute Inhalation LC₅₀ (rat) The Acute Inhalation LC₅₀ of this material places it in EPA Toxic Category IV.

EYE:

Primary eye irritation (rabbit): Conjunctival irritation clearing in 72 hours.

CHRONIC:

CARCINOGENICITY:

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: Pyrethrins

Carcinogenicity/ Oncogenicity –Slightly elevated incidences of benign tumors of the thyroid and liver were seen in rats following lifetime administration of high doses of Pyrethrins. Further detailed scientific studies into the mode of action responsible for these effects show that:

- Because of biological species differences, the rat thyroid tumors are not relevant to humans;
- The rat liver tumors occur in animals *only* at doses greatly exceeding human exposure levels and that cause cell proliferation (mitogenesis).

Based on these data, the USEPA has classified Pyrethrins as “Not Likely to be Carcinogenic to Humans” at doses that do not cause a mitogenic response in the liver/cell proliferation.” Thus, Pyrethrins can be considered to be non-carcinogenic at exposure levels relevant to human use of Pyrethrins-containing products.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

This product is 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 wash waters.

This product is highly toxic to honey bees exposed to direct spray on blooming crops or other vegetation. Avoid use when bees are actively foraging.

This product is toxic to aquatic organisms. Do not contaminate aquatic habitats, such as ponds, lakes, rivers, streams, and wetlands when cleaning and rinsing spray equipment or containers. A buffer zone of 2 meters (early season) or 1 meter (late season) is required between the downwind edge of the boom and sensitive aquatic habitats such as ponds, lakes, rivers, streams, and wetlands. Do not spray immediately after a rainfall or if there is a forecast for rain during or within 48 hours after application. Do not apply by air.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Triple- or pressure-rinse the empty container and add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior

CHEMTREC[®] (TRANSPORTATION): (800)-424-9300 **MEDICAL EMERGENCIES:** 1-888-740-8712

MATERIAL SAFETY DATA SHEET



McLaughlin Gormley King Company

PRODUCT CODE:

007443, PyGanic® Crop Protection EC 1.4i(CANADA)

CANADA

Page: 6 of 7

Revision Date: 6/30/2011

to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

RCRA \ CERCLA HAZARDOUS WASTE \ SUBSTANCES:

INGREDIENT

Pyrethrins

RCRA ID#:

N/A

CERCLA RQ-VALUE

1 Lb.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION

PROPER SHIPPING NAME:

Environmentally Hazardous Substance, Liquid, N.O.S.,
RQ (Pyrethrins)

HAZARD CLASS:

9

IDENTIFICATION NUMBER (UN or NA):

UN3082

PACKING GROUP:

III

REPORTABLE QUANTITY (RQ) UNDER

1 Lb.

CERCLA:

OTHER SHIPPING INFORMATION:

This material is not regulated as a hazardous material by the DOT in quantities less than 71.4 Lbs.

Shipping name for quantities less than 71.4 Lbs. : Insecticides, Insect or Animal Repellents, Liquid, N.O.S.

INTERNATIONAL TRANSPORTATION REGULATIONS:

AIR (ICAO/ IATA) DESCRIPTION:

Environmentally Hazardous Substance, Liquid, N.O.S.,
RQ (Pyrethrins)

HAZARD CLASS:

9

IDENTIFICATION NUMBER (UN or NA):

UN3082

PACKING GROUP:

III

VESSEL (IMO/ IMDG) DESCRIPTION:

Environmentally Hazardous Substance, Liquid, N.O.S.,
RQ (Pyrethrins)

HAZARD CLASS:

9

IDENTIFICATION NUMBER (UN or NA):

UN3082

PACKING GROUP:

III

CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG) CLASSIFICATION:

SHIPPING NAME: Not regulated

HAZARD CLASS: None

UN Number: None

PACKING GROUP: None

CHEMTREC® (TRANSPORTATION): (800)-424-9300

MEDICAL EMERGENCIES: 1-888-740-8712

