1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PYGANIC™ Crop Protection EC 1.4
PRODUCT DESCRIPTION: An Insecticide for Organic Crop Protection
PRODUCT CODE: 007433, EPA REG. NO. 1021-1751

MANUFACTURER
McLaughlin Gormley King Co.
8810 10th Ave. N
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’s Hours of operation are 8:00 am to 4:30 pm CST, 14:30 to 22:30 GMT.

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Wt.%</th>
<th>CAS#</th>
<th>EINECS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>1.4</td>
<td>008003-34-7</td>
<td>232-319-8</td>
</tr>
</tbody>
</table>

COMMENTS:
Ingredients not identified are proprietary or nonhazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
IMMEDIATE CONCERNS:
CAUTION. Eye and Skin Irritant. Harmful if swallowed or absorbed through skin. Inhalation of vapors can be harmful. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapors. ALWAYS Wear Safety Glasses with side shields and appropriate personal protective equipment when handling this material.

POTENTIAL HEALTH EFFECTS
EYES:
Can cause temporary irritation, tearing and blurred vision.

SKIN:
Can cause skin irritation. Can cause a burning or pricking sensation on more sensitive areas (face, eyes, mouth). Prolonged or repeated exposure can cause irritation and reddening of the skin, possibly progressing into dermatitis.
SKIN ABSORPTION:
Harmful if absorbed through skin.

INGESTION:
Can cause stomach irritation, resulting in nausea, cramps and vomiting. Can cause nervous system disorders, such as fatigue, dizziness, headaches, lack of coordination, and tremors.

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

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:
Remove contaminated clothing and wash affected areas with large amounts of soap and water. If irritation persists, get medical attention. Wash clothing separately before reuse.

INGESTION:
If swallowed call a physician or poison control center and seek medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION:
Remove affected person to fresh air. If breathing has stopped, administer artificial respiration and seek medical attention immediately.

NOTES TO PHYSICIAN:
None

5. FIRE FIGHTING MEASURES

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

FLAMMABLE CLASS:
This product is classified as a noncombustible liquid.

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, 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 pyrethrin which is 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 neoprene or nitrile. Wear chemically impervious apron such as neoprene or nitrile and leather shoes. Wear OSHA-approved safety glasses, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Wearing a respirator is not required when handling this product, but recommended in the absence of proper mechanical ventilation. Do not contaminate water, feed or food by storage, handling or disposal. Read and observe all precautions and instructions on the label.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th></th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Supplier OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>ppm</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
<tr>
<td>TWA</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

EXPOSURE LIMITS

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:
Wear OSHA-approved safety glasses with side shields, goggles or face shield.

SKIN:
Wear chemically impervious gloves and apron such as Neoprene or Nitrile.

RESPIRATORY:
In absence of proper mechanical ventilation, wear a NIOSH approved organic vapor respirator.

PROTECTIVE CLOTHING:
Wear chemically impervious gloves such as neoprene or nitrile, neoprene or nitrile apron, long sleeve shirt and leather shoes.

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 and 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 green houses, 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.
COMMENTS:

AGRICULTURAL REQUIREMENTS:
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 over short-sleeved shirt and short pants;
Chemical-resistant gloves, such as Barrier Laminated, Nitrile Rubber, Neoprene Rubber or Viton;
Chemical-resistant footwear plus socks; and
Chemical-resistant headgear for overhead exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Vegetable oil odor.
APPEARANCE: Clear amber liquid.
pH: 6.32@ 5% in water.
PERCENT VOLATILE: Negligible
VAPOR PRESSURE: Not Available
VAPOR DENSITY: Not Available.
BOILING POINT: Not Available
FREEZING POINT: Not Available
MELTING POINT: Not Applicable
SOLUBILITY IN WATER: Partially miscible in water.
SPECIFIC GRAVITY: .983 (water=1) at 20°C
VISCOITY: 148.17CPS at 24°C Brookfield

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
Acute toxicological data not available.
EYE EFFECTS:
Data not available.

SKIN EFFECTS:
Data not available.

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.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:
This product is extremely toxic to fish and other aquatic invertebrates.

GENERAL COMMENTS:
This pesticide is highly toxic to fish and other wildlife. 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. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on the label.

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.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>RCRA ID#</th>
<th>Cercla RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>N/A</td>
<td>1lb.</td>
</tr>
</tbody>
</table>
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: 71 lbs.
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: None present.

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 inventory reporting requirements.
16. OTHER INFORMATION

REVISION SUMMARY
Revision #: 1

This MSDS replaces the May 03, 2000 MSDS. Any changes in information are as follows:
In Section 8
Other Use Precautions (text) Section 8 Footnotes

HMIS CODES
FIRE: 1 HEALTH: 1 REACTIVITY: 1

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 must ensure that the proper personal protective equipment is provided consistent with the information contained in sections 7 and 8 of this MSDS.

COMMENTS:
The data contained herein is based on information currently available to MGK Company, and believed to be factual and the opinions expressed to be those of qualified experts; however, this data is not to be taken as a warranty or representation for which MGK Company assumes legal responsibility.

MSDS Prepared by T.A. Lennan.