MATERIAL SAFETY DATA SHEET

Date-Issued: 11/19/1998 MSDS Ref. No: 007369 Date-Revised: 08/18/2003

Revision No: 4

PRYOCIDE® Concentrate 7369

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PRYOCIDE® Concentrate 7369

PRODUCT DESCRIPTION: An Insecticide for formulating or repackaging use only.

PRODUCT CODE: 007369, EPA REG. NO. 1021-1544

MANUFACTURER 24 HR. EMERGENCY TELEPHONE NUMBERS

 McLaughlin Gormley King Co.
 CHEMTREC U.S. and CANADA:
 (800) 424-9300

 8810 10th Ave. N
 CHEMTREC All Other Areas:
 (703) 527-3887

 Minneapolis, MN 55427
 Emergency Phone:
 (888) 740-8712

Product Stewardship: (763) 544-0341 **Customer Service:** (800) 645-6466

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 24 hours a day at 1-888-740-8712.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	<u>Wt.%</u>	CAS#	EINECS #
Pyrethrins	3	008003-34-7	232-319-8
Piperonyl Butoxide	30	000051-03-6	200-076-7
N-butanol	5 - 7	000071-36-3	200-751-6
Glycol Ethers	0 - 2	000112-34-5	203-961-6
Petroleum Distillate	10 - 15	064742-47-8	265-149-8

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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! CORROSIVE. Causes irreversible eye damage. FLAMMABLE LIQUID. Do not use near heat, open flame, or any ignition source. Harmful if swallowed, absorbed through the skin, or inhaled. Wear goggles, a face shield, or safety glasses with side-shields when handling this material.

POTENTIAL HEALTH EFFECTS

EYES: Severe eye irritant. Can cause redness, irritation accompanied by tearing, blurred vision and permanent tissue destruction.

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

INGESTION:

Harmful if swallowed. Can cause stomach irritation, resulting in nausea, cramps and vomiting. Can cause nervous system disorders, such as fatigue, dizziness, headaches, lack of coordination.

INHALATION: May be irritating to respiratory tract. Excessive inhalation can cause nasal and respiratory irritation, nausea and nervous system disorders, such as fatigue, dizziness, headaches, lack of coordination, tremors and unconsciousness.

MEDICAL CONDITIONS AGGRAVATED: Individuals with preexisting diseases of the liver, kidneys, skin or peripheral nervous system may have increased susceptibility to the toxicity of excessive exposures.

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,

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: Immediately call a poison control center or doctor. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or a doctor. Do not 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 advise.

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 52.8°C (127°F)TAG Closed Cup

FLAMMABLE CLASS: FLAMMABLE LIQUID

EXTINGUISHING MEDIA: Foam, carbon dioxide or dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions this product will 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: Shut off ignition sources. 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: Shut off ignition sources. 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

ENVIRONMENTAL PRECAUTIONS

WATER SPILL:

Contains pyrethrin's, 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

GENERAL PROCEDURES: Do not use near heat, open flame, or any other ignition source.

HANDLING: Take prudent precautions to avoid contact with skin, eyes, and clothing. ALWAYS wear OSHA-approved safety glasses with side-shields or safety goggles when handling this material. 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, feed or food by storage, handling or disposal. Read and observe all precautions and instructions on the label.

STORAGE: Store containers upright and closed. Store in areas that are cool, dry, and well-ventilated. Keep away from heat, ignition sources, and away from strong acids, bases, and oxidizers. Emptied containers may retain product residues. Keep Away from Children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		<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		
Piperonyl Butoxide	TWA	None		None		None	
N-butanol	TWA	100	300	50 ^[1]	152		
Glycol Ethers	TWA	None		None		None	
Petroleum Distillate							

OSHA TABLE COMMENTS:

1. Exposure limit for skin.

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 a face-shield.

SKIN: Take prudent precautions to avoid contact with skin and clothing.

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild sweet odor characteristic to pyrethrins.

COLOR: Amber **pH:** Not Applicable

PERCENT VOLATILE: Less than 15% VAPOR PRESSURE: Not Available VAPOR DENSITY: Not Available. BOILING POINT: Not Available

SOLUBILITY IN WATER: Miscible in water **SPECIFIC GRAVITY:** 1.013 (water=1)

VISCOSITY: Not Available

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: >2.0 gm/kg **ORAL LD**₅₀: 3.38 gm/kg

INHALATION LC₅₀: 3.07 mg / L

EYE EFFECTS: Produces moderate conjunctival irritation. After 21 days, slight irritation was noted for 4/6 animals. Corneal opacity was observed in 6/6 animals that persisted through 4 days in 3/6 animals and persisted through 21 days in 2/6 animals. Iritis was observed in 6/6 animals which was not evident at 7 days.

SKIN EFFECTS: Produced a primary skin irriation index of 0.71 in albino rabbit.

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.

Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures to PBO. The significance of these observations is questionable and under review. The doses at which tumors were observed for PBO greatly exceeded potential human exposure from labeled uses.

12. ECOLOGICAL INFORMATION

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

GENERAL COMMENTS: This product is toxic to fish and other aquatic invertebrates. Do not contaminate water when disposing of equipment washwaters. 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

DISPOSAL METHOD: This product should be disposed of according to local, state and federal regulations. When disposing of waste or surplus avoid contact with eyes and skin. Wear impervious gloves/clothing and chemical safety goggles. Do not wash into drains. Do not mix with other waste materials.

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

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

Component RCRA Code Cercla RQ Pyrethrins N/A 1lb. n-Butanol U031 5.000 lbs.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquid, N.O.S. (Butanol), RQ (Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993 PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1 lbs.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Flammable Liquid, N.O.S. (Butanol), RQ (Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993 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: YES PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES

313 REPORTABLE INGREDIENTS:

COMPONENT CAS# Max % Piperonyl Butoxide 000051-03-6 1.0 n-Butanol 000071-36-3 7.0 Glycol Ethers 000112-34-5 2.0

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).

16. OTHER INFORMATION

REASON FOR ISSUE: Update to 16 section format.

REVISION SUMMARY Revision #: 4

In Section 1 Prepared By

In Section 3

Emergency Overview - Immediate Concerns

In Section 4

Firstaid - Eyes Firstaid - Skin Firstaid - Ingestion Firstaid - Inhalation

In Section 7 Handling

In Section 8

Skin Protection Clothing Protection

In Section 12 Ecological

In Section 16

Section 16 Footnotes

HMIS RATING



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 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. Azzivitto.