

Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC® U.S. and CANADA: 1(800) 424-9300

CHEMTREC® All Other Areas: 1(703) 527-3887

FOR TRANSPORTATION:

CIRRUS™ Fogging Concentrate

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CIRRUS™ Fogging Concentrate

PRODUCT DESCRIPTION: An Insecticide for use as a ULV, Space, Area, Contact Spray, or Thermal Fog.

PRODUCT CODE: 2651, EPA REG. NO.: 1021-1812

ACTIVE INGREDIENT(S): ETOC® (Prallethrin); Piperonyl Butoxide; MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)

MANUFACTURER

McLaughlin Gormley King Company 8810 10th Avenue North Minneapolis, MN 55427

Emergency Contact: SafetyCall® Emergency Phone: 1(888) 740-8712

Alternate Emergency Phone: 1(952) 852-9509 Product Stewardship: 1(800) 645-6466

E-Mail: mgk-sds@mgk.com

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

For MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call 24 hours a day to 1-888-740-8712.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 5
Acute Toxicity (Inhalation), Category 4
Skin Sensitization, Category 1B
Aspiration Hazard, Category 2

Environmental:

Acute Hazards to the Aquatic Environment, Category 1

GHS LABEL



Exclamation mark (GHS 07)



Health hazard (GHS 08)



Environment (GHS 09)

SIGNAL WORD: WARNING HAZARD STATEMENTS

H332: Harmful if inhaled.

H317: May cause an allergic skin reaction.

H305: May be harmful if swallowed and enters airways.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

PRECAUTIONARY STATEMENT(S)

Prevention:

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P270: Do no eat, drink, or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

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

COMMENTS: This material is considered hazardous by the 2012 OSHA Hazard Communication Standard [29 CFR 1910.1200(a)(1)], and the G.H.S.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
ETOC® (Prallethrin)	2	23031-36-9
Piperonyl Butoxide	4	51-03-6
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	6.38	113-48-4
Petroleum Distillates	75 - 90	64742-47-8

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

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, IMMEDIATELY call a poison control center or doctor for treatment advice. DO NOT give **any** liquid to the person. Do not induce vomiting unless told to do so by a poison contol 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: Contains Pyrethroids and Petroleum Distillates - vomiting may pose an aspiration pneumonia hazard.



Date Issued: 5/6/2013 MSDS No: CIRRUS™ Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

For skin effects, a highly efficient therapeutic agent for Pyrethroid exposure is topical application of Tocopherol Acetate (Vitamin E).

5. FIRE FIGHTING MEASURES

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

EXTINGUISHING MEDIA: Foam, carbon dioxide or dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: This product is classified as Non-Combustible, however in the extreme temperatures that fires may produce, some of the constituents of this formula may decompose to give off such gases as carbon dioxide, carbon monoxide, 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.

SENSITIVE TO STATIC DISCHARGE: Yes, use proper bonding and/or grounding procedures.

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 Pyrethroids, which are toxic to fish and other aquatic invertebrates. Contaminated absorbent and wash water should be disposed of according to local, state/provincial and federal/national regulations.

7. HANDLING AND STORAGE

HANDLING: Mixers, loaders, and other handlers:

Wear a long-sleeved shirt and long pants, shoes and socks.

Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton.

Applicators using hand-held foggers in an enclosed-area must also wear the following additional PPE:

Wear a MSHA/ NIOSH-approved respirator, such as a half-face, full-face, or hood-style NIOSH-approved respirator with a dust/mist filtering cartridge (MSHA/ NIOSH approval number prefix TC-21C), or a canister approved for pesticides (MSHA/ NIOSH approval number prefix TC-14G), or a cartridge or canister with any R, P or HE filter.

Do not contaminate water, food or feedstuffs by storage, handling, or disposal.

READ AND OBSERVE ALL PRECAUTIONS AND INSTRUCTIONS ON THE PRODUCT LABEL.

STORAGE: Store in a cool, dry, well-ventilated place. Keep container closed. Do not use or store near heat, sparks, open flame, any ignition sources, or near strong acids, bases, and oxidizers. Always store pesticides in the original container. Store away from food and pet-food.



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

KEEP OUT OF REACH OF CHILDREN.

ELECTROSTATIC ACCUMULATION HAZARD: This product contains petroleum distillates for which there is potential for the accumulation of static electricity. Consideration should be given to bonding and grounding of equipment during loading, unloading, and transfer of this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

EX COOKE GOIDELINES									
OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)									
		EXPOSURE LIMITS							
		OSHA PEL ACG			H TLV	SupplierOEL			
Chemical Name		ppm	mg/m³	ppm	mg/m³	ppm	mg/m³		
ETOC® (Prallethrin)	TWA	None		None		None			
Piperonyl Butoxide	TWA	None		None		None			
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	TWA	None		None		None			
Petroleum Distillates	TWA	None		None		152 ^[1]	1200 [1]		

OSHA TABLE COMMENTS:

1. Based on total hydrocarbon composition.

ENGINEERING CONTROLS: Ventilate treatment area thoroughly before re-entry.

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: Applicators using hand-held foggers in an enclosed-area must also wear the following additional PPE: Wear a MSHA/ NIOSH-approved respirator, such as a half-face, full-face, or hood-style NIOSH-approved respirator with a dust/ mist filtering cartridge (MSHA/ NIOSH approval number prefix TC-21C), or a canister approved for pesticides (MSHA/ NIOSH approval number prefix TC-14G), or a cartridge or canister with any R, P or HE filter.

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

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: Pine Odor.

APPEARANCE: Clear, yellow/ golden colored liquid.

COLOR: 1.0 on Gardner Scale.

pH: Not Applicable; Product not intended to be diluted in water. **FLASHPOINT AND METHOD:** > 93.3 °C (200 °F) TAG Closed Cup



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

VAPOR DENSITY: Heavier than air. **FREEZING POINT:** Not Determined.

SOLUBILITY IN WATER: Immiscible in water.

SPECIFIC GRAVITY: 0.808 (Water = 1) at $20 \,^{\circ}$ C (68 $^{\circ}$ F) **VISCOSITY #1:** 10.0 CPS at $23.5 \,^{\circ}$ C (74.3 $^{\circ}$ F) Brookfield

(VOC): 0 %

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

Notes: Albino rabbit. **ORAL LD**₅₀: > 5.0 gm/kg

Notes: Albino rat.

INHALATION LC₅₀: > 3.12 mg/L

Notes: Rats exposed for 4 hours to test atmosphere. The Acute Inhalation LC₅₀ of this material places it in EPA Toxic

Category IV.

EYE EFFECTS: Irritation cleared within 24 hours.

SKIN EFFECTS: No irritation at 72 hours. Irritation Index = 0.29

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.

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. Doses at which these effects were observed greatly exceeded anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Ecotoxicological/ environmental data not available for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: To avoid wastes, use all materials in the containers by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (NOTE: such programs are often run by state or local governments, or by industry).



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

EMPTY CONTAINER: Non-refillable container. DO NOT reuse or refill this container.

Triple-rinse container (or equivalent) promptly after emptying. Then, offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of container in a sanitary landfill, or by other procedures approved by state and local authorities.

Triple-rinse as follows for containers less than < 5 gallons (< 18.9 L) or less: Empty the remaining contents into application equipment or a mix-tank and drain for 10 seconds after the flow begins to drip. Fill the container ¹/₄ full with water and re-cap. Shake for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple-rinse as follows for containers greater than > 5 gallons (> 18.9 L): Empty the remaining contents into application equipment or a mix-tank. Fill the container ¹/₄ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Repeat this procedure two more times.

RCRA/EPA WASTE INFORMATION: None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40CFR 251.33) or CERCLA Hazardous Substance list (40 CFR Part 302 Table 302.4)

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Insecticides, Insect or Animal Repellent, Liquid, N.O.S.

PRIMARY HAZARD CLASS/DIVISION: Non-Hazardous

OTHER SHIPPING INFORMATION: This material is not regulated by the DOT as a hazardous material when shipped in Non-Bulk quantities (i.e., less than 119 Gallon's / 450 Liter's).

When shipping in Bulk-quantities (i.e., more than 119 Gallon's / 450 Liter's), please contact MGK[®] for the proper shipping description.

AIR (ICAO/IATA)

SHIPPING NAME: Insecticides, Insect or Animal Repellent, Liquid, N.O.S.

PRIMARY HAZARD CLASS/DIVISION: Non-Hazardous

VESSEL (IMO/IMDG)

SHIPPING NAME: Not Available

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes

313 REPORTABLE INGREDIENTS:

COMPONENT, CAS#, Max %

Piperonyl Butoxide, 000051-03-6, 4.00

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: There are no SARA Title III Section 302 extremely hazardous substances present in this formulation



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

(40 CFR 355).

There are no components that are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4) in this formulation.

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.

REGULATIONS

STATE REGULATIONS:

VOLATILE ORGANIC COMPOUNDS (VOC):

This product contains no VOC's (0%).

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

NOTE: 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, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

CAUTION. Harmful if absorbed through the skin. Contains petroleum distillates - Vomiting may cause aspiration pneumonia. Avoid contact with skin, eyes, and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE):

Mixer's, loaders, applicators, and other handlers:

Wear a long-sleeved shirt and long pants, shoes and socks.

Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton.

Applicators using hand-held foggers in an enclosed-area must also wear the following additional PPE:

Wear a MSHA/ NIOSH-approved respirator, such as a half-face, full-face, or hood-style NIOSH-approved respirator with a dust/ mist filtering cartridge (MSHA/ NIOSH approval number prefix TC-21C), or a canister approved for pesticides (MSHA/ NIOSH approval number prefix TC-14G), or a cartridge or canister with any R, P or HE filter.

PHYSICAL OR CHEMICAL HAZARDS: Combustible. Do not use or store near heat or open flame.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 5/6/2013 MSDS. Revised: **Section 2:** POTENTIAL HEALTH EFFECTS (SKIN, SKIN ABSORPTION, INHALATION, INGESTION). **Section 4:** CHRONIC EFFECTS. **Section 7:** GENERAL PROCEDURES. **Section 8:** PERSONAL PROTECTIVE EQUIPMENT - RESPIRATORY. **Section 15:** FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT).



Date Issued: 5/6/2013

MSDS No: CIRRUS™

Date-Revised: 6/5/2014

Revision No: 2

CIRRUS™ Fogging Concentrate

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 2, 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