

SAFETY DATA SHEET (GHS)



Date Issued : 9/22/2014
 MSDS No : Troika™
 Date-Revised : 9/22/2014
 Revision No : 1

Troika™ Misting Concentrate

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Troika™ Misting Concentrate
PRODUCT DESCRIPTION: An Insecticide Formulation for use in Spraying Equipment.
PRODUCT CODE: 2980, EPA REG. NO. : 1021-2609
ACTIVE INGREDIENT(S): Pyrethrins; Permethrin; Piperonyl Butoxide

MANUFACTURER

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

24 HR. EMERGENCY TELEPHONE NUMBERS

FOR TRANSPORTATION:

CHEMTREC® U.S. and CANADA: 1(800) 424-9300
CHEMTREC® All Other Areas: 1(703) 527-3887

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 or 1-952-852-9509 outside of the U.S.A.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
 Acute Toxicity (Inhalation), Category 3
 Skin Sensitization, Category 1B

Environmental:

Aquatic-Acute, Category 1
 Aquatic-Chronic, Category 1

GHS LABEL



Exclamation
 mark
 (GHS 07)



Environment
 (GHS 09)

HAZARD STATEMENTS

H302: Harmful if swallowed.
 H332: Harmful if inhaled.
 H317: May cause an allergic skin reaction.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

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Prevention:

- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink, or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment.

Response:

- 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.
- P330: Rinse mouth.
- P391: Collect spillage.

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
Pyrethrins	2.75	8003-34-7
Permethrin	6.25	52645-53-1
Piperonyl Butoxide	27.5	51-03-6
Petroleum Distillates	< 2	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. 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/ pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

5. FIRE FIGHTING MEASURES

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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 combust to give off toxic gases such as carbon dioxide, carbon monoxide, nitrogen oxides, Hydrogen Chloride, and Chlorine gas.

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 and Pyrethroids, 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 OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield. 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. 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 (preferably locked) area that is inaccessible to children and animals. Keep this product in its tightly-closed, original container when not in use.

KEEP OUT OF REACH OF CHILDREN

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Pyrethrins	TWA		5		5		
Permethrin	TWA	None		None			10
Piperonyl Butoxide	TWA	None		None		None	
Petroleum Distillates	TWA	[1]	5 [1]	[1]	5 [1]	100	525
	STEL				10		

OSHA TABLE COMMENTS:
 1. As oil-mist, if generated.

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

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield.

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

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: Mild, sweet odor.

APPEARANCE: Milky, white/tan colored liquid.

pH: 5.3

Notes: @ 5% in water.

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

VAPOR DENSITY: Heavier than air.

FREEZING POINT: Not Available

SOLUBILITY IN WATER: Miscible in water.

SPECIFIC GRAVITY: 1.029 (Water = 1) at 21.2°C (70.2°F)

VISCOSITY #1: 32.3 cPs at 21.2°C (70.2°F) Brookfield

(VOC): < 4.000 %

10. STABILITY AND REACTIVITY

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STABLE: Yes

HAZARDOUS POLYMERIZATION: No

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

HAZARDOUS DECOMPOSITION PRODUCTS: See Section 5 for combustion products.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 5000 mg/kg

Notes: Albino rabbit.

ORAL LD₅₀: 1750 mg/kg

Notes: Albino rat.

INHALATION LC₅₀: > 2.06 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: Slightly irritating (Albino rabbits). Produced a Primary Dermal Irritation Index of 0.9. All animals were free of erythema and edema by Day 7.

SENSITIZATION: A contact dermal sensitizer.

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 - 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:

- 1) Because of biological species differences, the rat thyroid tumors are not relevant to humans.
- 2) 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.

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: This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This product may contaminate water through runoff, and has the potential for runoff for

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several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters.

BEE WARNING: This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply to blooming crops or weeds when bees are visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

13. DISPOSAL CONSIDERATIONS

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: 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: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., RQ (Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1 Lb. (Pyrethrins/ Pyrethrum)

OTHER SHIPPING INFORMATION: This material is not regulated as a hazardous material by the DOT in quantities less than < 36 Lbs.

Shipping name for quantities less than < 36 Lbs.: Insecticides, Insect or Animal Repellents, Liquid, N.O.S.

AIR (ICAO/IATA)

SHIPPING NAME: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., RQ (Pyrethrins)

PRIMARY HAZARD CLASS/DIVISION: 9

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PACKING GROUP: III
VESSEL (IMO/IMDG)
SHIPPING NAME: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., RQ (Pyrethrins)
PRIMARY HAZARD CLASS/DIVISION: 9
PACKING GROUP: III
MARINE POLLUTANT #1: Pyrethrins/ Pyrethrum

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 %

Permethrin, 052645-53-1, 6.25

Piperonyl Butoxide, 000051-03-6, 27.5

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.

REGULATIONS

STATE REGULATIONS:

VOLATILE ORGANIC COMPOUNDS (VOC):

This product contains less than 4% VOC's.

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 swallowed. 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:

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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.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 9/22/2014 MSDS. Revised: **Section 9:** pH.

HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	1
PERSONAL PROTECTION	<input type="checkbox"/>	

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