

SAFETY DATA SHEET (GHS)



Date Issued : 5/5/2014
 MSDS No : 007480
 Date-Revised : 5/6/2014
 Revision No : 1

Tersus™ Insecticide

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Tersus™ Insecticide
PRODUCT DESCRIPTION: An Insecticide for Export and Domestic Crop Protection.
PRODUCT CODE: 7480, EPA REG. NO. : 1021-2616
ACTIVE INGREDIENT(S): Pyrethrins

MANUFACTURER

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

Emergency Contact: SafetyCall@

E-Mail: mgk-sds@mgk.com

Emergency Phone: 1(888) 740-8712

Alternate Emergency Phone: 1(952) 852-9509

Service Number: 1(800) 645-6466

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.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health	Environmental
Acute Toxicity (Oral), Category 4 Acute Toxicity (Inhalation), Category 4 Skin Sensitization, Category 1B	Aquatic-Acute, Category 1



GHS LABEL

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 Environment (GHS 09)	 Exclamation mark (GHS 07)
WARNING	WARNING
H400: Very toxic to aquatic life.	H302: Harmful if swallowed. H332: Harmful if inhaled. H312: Harmful in contact with skin.
PRECAUTIONARY STATEMENT(S)	
<p>Prevention:</p> <p>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.</p> <p>Response:</p> <p>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.</p> <p>Storage:</p> <p>P403+P233: Store in a well-ventilated place. Keep container tightly closed.</p> <p>Disposal:</p> <p>P501: Dispose of contents/container to an approved waste disposal plant.</p>	

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	EINECS
Pyrethrins	5	8003-34-7	232-319-8

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

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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 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: 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, 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, 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: 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 place. Keep container closed. Always store pesticides in the original container. Store away from food and pet-food.

KEEP OUT OF REACH OF CHILDREN.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
				EXPOSURE LIMITS			
				OSHA PEL		ACGIH TLV	
Chemical Name				ppm	mg/m ³	ppm	mg/m ³
Pyrethrins				TWA		5	5

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.

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 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 with anything that has been treated, such as plants, soil, or water, is:

Long-sleeved shirt and long pants;

Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton;

Shoes plus socks.

COMMENTS: 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 treat agricultural plants on farms, forests, nurseries or greenhouses.

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Do not enter or allow others to enter until sprays have dried.

Do not enter or allow others to enter until vapors, mists, and aerosols have dispersed, and the treated area has been thoroughly ventilated.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Sweet, solvent-odor.

APPEARANCE: Clear, amber-brown colored liquid.

COLOR: Gardner Scale 10

pH: 4.5

Notes: @ 5% in water.

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

VAPOR DENSITY: Heavier than air.

FREEZING POINT: Not Determined

SOLUBILITY IN WATER: Not Determined

SPECIFIC GRAVITY: 0.939 (Water = 1) at 20 °C (68°F)

VISCOSITY #1: 57.5 CPS at 19.7°C (67.5°F) Brookfield

(VOC): < 1.000 %

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: > 2000 mg/kg

Notes: Albino rabbit.

ORAL LD₅₀: > 2000 mg/kg

Notes: Albino rat.

INHALATION LC₅₀: > 2.12 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 clearing within 48 hours.

SKIN EFFECTS: Slight irritation at 72 hours. Primary Irritation Index = 1.3.

SENSITIZATION: Positive.

GENERAL COMMENTS: Some or all of the toxicity data reported above was bridged from a substantially similar formula.

COMMENTS: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC,

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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.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This product is toxic to aquatic organisms, including fish and invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. This product has a potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

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 contaminate water when disposing of equipment washwaters or rinsate.

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.

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

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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 < 20 Lbs.

Shipping name for quantities more than > 20 Lbs.: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., RQ (Pyrethrins), Class 9, Packing Group III

AIR (ICAO/IATA)

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

PRIMARY HAZARD CLASS/DIVISION: 9

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: This product contains no SARA Title III Section 313 chemicals that exceed the reporting limits.

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 1% VOC's.

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

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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. Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. 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, 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.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 5/6/2014 MSDS. Revised: **Section 9: FREEZING POINT.**

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