

MATERIAL SAFETY DATA SHEET

Chem-Tech, Ltd.

**SureKill Advanced Insecticide Products
Total Release Aerosol**

Date Issued : 11/27/2013
Date-Revised : 11/27/2013
Item No. 0111511
Revision No : 1

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SureKill Advanced Insecticide Products Total Release Aerosol**PRODUCT DESCRIPTION:** An Indoor-Use Total Release Aerosol Insecticide.**PRODUCT CODE:** 002602, EPA REG. NO. : 1021-1635-47000**ACTIVE INGREDIENT(S):** Pyrethrins; Piperonyl Butoxide; MGK®-264 (N-Octyl Bicycloheptene Dicarboximide); Esfenvalerate**MANUFACTURER**

Chem-Tech, Ltd
4515 Fleur Drive
Des Moines, IA 50321

Emergency Contact: SafetyCall®**E-Mail:** mgk-sds@mgk.com**Emergency Phone:** 1(888) 740-8712**Alternate Emergency Phone:** 1(952) 852-9509**Service Number:** 515-287-6778**24 HR. EMERGENCY TELEPHONE NUMBERS****FOR TRANSPORTATION:****CHEMTREC® U.S. and CANADA:** 1(800) 424-9300**CHEMTREC® All Other Areas:** 1(703) 527-3887

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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUTION - HIGHLY FLAMMABLE INGREDIENT. Contents under pressure. DO NOT use or store near heat, sparks, or open flame. Shut off all ignition sources. DO NOT expose to temperatures above 130°F (54.4°C) as bursting may occur. Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product.

Personal Protective Equipment (PPE):

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.

DO NOT puncture or incinerate container. Follow the "Directions For Use" on the product label very carefully.

POTENTIAL HEALTH EFFECTS

EYES: Causes moderate eye irritation.

SKIN: May cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth).

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: May be harmful if swallowed.

INHALATION: Harmful if inhaled.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: None known.

COMMENTS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name	Wt.%	CAS	EINECS
Pyrethrins	0.05	8003-34-7	232-319-8
Piperonyl Butoxide	0.1	51-03-6	200-076-7
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	0.16	113-48-4	204-029-1
Esfenvalerate	0.1	66230-04-4	Not Avail.
Petroleum Distillates	< 10	64742 -47-8	265-149-8
Liquefied Petroleum Gas	25 - 50	68476-86-8	270-705-8

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 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).
 Diazepam has been recommended to reduce the CNS effects of Esfenvalerate.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: This aerosol is NOT classified as FLAMMABLE by the flame extension test method described in 16 CFR 1500.45.

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 HYDROGEN CYANIDE, carbon monoxide, carbon dioxide and nitrogen oxides.

EXPLOSION HAZARDS: Contents under pressure. Exposure to temperatures above 130°F (54.4°C) may cause bursting.

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.

SENSITIVITY TO IMPACT: Forceful impacts can cause damage to aerosol unit and may cause a bursting or explosion hazard.

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

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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 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

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

HANDLING: DO NOT use more than one fogger per room. DO NOT use in small, enclosed spaces such as closets, cabinets or under counters or tables. DO NOT use in a room 5 ft. X 5 ft. or smaller; instead, allow fog to enter from other rooms. **Turn off ALL ignition sources such as pilot lights (shut off gas valves), other open flames or running electrical appliances that cycle off and on (i.e., refrigerators, thermostats, etc.).** Call your gas utility or management company if you need assistance with your pilot lights.

Avoid contact with skin, eyes, and clothing. Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton. Wear a long-sleeved shirt, long pants, shoes and socks.

Do not contaminate water, food, or feedstuffs by storage, handling, or by disposal. Read and observe all precautions and instructions on the product label.

STORAGE: Store containers upright and closed. Always store pesticides in the original container. Store away from food and pet-food. Store in areas that are cool, dry, and well-ventilated. **DO NOT expose to temperatures above 130°F (54.4°C), as bursting may occur.** DO NOT use or store near heat, sparks, open flame, near any ignition sources, or near strong acids, bases, and oxidizers. Emptied containers may retain product residues.

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		SupplierOEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Pyrethrins	TWA		5		5		
Piperonyl Butoxide	TWA	None		None		None	
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	TWA	None		None		None	
Esfenvalerate	TWA	None		None		[1]	2 [1]
Petroleum Distillates	TWA	[2]	5 [2]	[2]	5 [2]	100	525
	STEL				10		
Liquefied Petroleum Gas	TWA	1000	1800	1000	1800	None	
OSHA TABLE COMMENTS: 1. Skin 2. As oil-mist, if generated.							

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: Wearing a respirator is not normally required when handling this product. Use in well ventilated areas. Take prudent precautions to avoid breathing vapors and/ or spray mists of this product.

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: Liquefied gases and liquid.

ODOR: Solvent odor.

APPEARANCE: Milky emulsion.

pH: 7.2

Notes: @ 5% in water.

pH measurement is for the aerosol contents less the compressed gas propellant (i.e., Non-Volatiles).

VAPOR DENSITY: Heavier than air.

FREEZING POINT: Not Determined.

SOLUBILITY IN WATER: Partially miscible in water.

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Notes: Water Solubility analysis is for the aerosol contents less the compressed gas propellant (i.e., Non-Volatiles).

SPECIFIC GRAVITY: 0.97 (Water = 1) at 22.3°C (72.1°F)

Notes: Specific Gravity is for the aerosol contents less the compressed gas propellant (i.e., Non-Volatiles).

VISCOSITY #1: 930 CPS at 21.9°C (71.4°F) Brookfield on Non-Volatiles

(VOC): < 41.000 %

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

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

HAZARDOUS DECOMPOSITION PRODUCTS: See Section 5 for combustion products.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 2.0 gm/kg

Notes: Albino rabbit.

ORAL LD₅₀: > 5.0 gm/kg

Notes: Albino rat.

INHALATION LC₅₀: > 3.03 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 in 24 hours.

SKIN EFFECTS: Very slight irritation at 72 hours. Produced a primary skin irritation index of 0.84 in albino rabbits.

SENSITIZATION: Negative; Not considered to be a dermal sensitizer to albino guinea pigs.

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, 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

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carcinogenic effects.

12. ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION:** Ecotoxicological/ environmental data not available for this product.**13. DISPOSAL CONSIDERATIONS****DISPOSAL METHOD:**

IF EMPTY:

Non-refillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

IF PARTLY FILLED:

Call your local solid waste agency for disposal instructions. Never pour unused product down any indoor or outdoor drain.

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:** UN1950, Aerosols, Non-flammable, N.O.S.**PRIMARY HAZARD CLASS/DIVISION:** 2.2**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 2000 Lbs.**AIR (ICAO/IATA)****SHIPPING NAME:** UN1950, Aerosols, Non-flammable, N.O.S.**PRIMARY HAZARD CLASS/DIVISION:** 2.2**VESSEL (IMO/IMDG)****SHIPPING NAME:** UN1950, Aerosols, Non-flammable, N.O.S.**PRIMARY HAZARD CLASS/DIVISION:** 2.2**MARINE POLLUTANT #1:** Pyrethrins/ Pyrethrum**MARINE POLLUTANT #2:** Esfenvalerate**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****FIRE:** No **PRESSURE GENERATING:** Yes **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**

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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 41% VOC's.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 3/10/2004 MSDS. Revised: **Section 1:** 24 HR. EMERGENCY TELEPHONE NUMBERS, PRODUCT CODE.

HMIS RATING

HEALTH	☐	1
FLAMMABILITY	☐	4
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 7 and 8 of this MSDS.

COMMENTS: The data contained herein are based on information currently available to Chem-Tech, Ltd. 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 Chem-Tech, Ltd. assumes legal responsibility.

MSDS Prepared by S. Rogosheske