Material Safety Data Sheet

Black Flag Kills Ants Roaches Spiders

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Black Flag Kills Ants Roaches Spiders
EPA REGISTRATION NUMBER: 73049-331-79529
MSDS IDENTIFICATION CODE/NO.: Mixture; a.i.'s, tetramethrin, permethrin, piperonyl butoxide
CHEMICAL NAME:
SYNONYM(S):
END-USE PRODUCT DESCRIPTION: Black Flag Kills Ants Roaches Spiders insecticide is highly effective against more than 20 ornamental garden and residential pest. Labeled for use in and around the house. Pest control includes fleas, mosquitoes, wasps, bees, crickets, cockroaches, carpenter ants spiders, ticks and fleas.

DISTRIBUTOR
Black Flag Brands, LLC.
25 Garden Street
NY Mills, NY 13417

EMERGENCY TELEPHONE NUMBERS
HEALTH EMERGENCY OR SPILL (24 hr):
(800) 887-3524

PRODUCT INFORMATION
BLACK FLAG BRANDS, LLC:
(877) 398-9444
www.BlackFlag.com

EMERGENCY TELEPHONE #: (800) 887-3524
Revision Number: 0
Revision Date: 09/03/2003
### SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name (CAS #) [Chemical Name]</th>
<th>Weight Percent</th>
<th>Exposure Limit</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Tetramethrin (7696-12-0) ***</td>
<td>= 0.15</td>
<td>None</td>
<td>Established</td>
</tr>
<tr>
<td>[3,4,5,6-Tetrahydrophthalimidomethyl (1RS)-cis-trans-chrysanthemate (1,3,4,5,6,7-Hexahydro-1,3-dioxo-2H-isooindol-2-yl)methyl 2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Permethrin (52645-53-1) ***</td>
<td>= 0.15</td>
<td>None</td>
<td>Established</td>
</tr>
<tr>
<td>[3-Phenoxybenzyl (1RS)-cis-trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (3-Phenoxyphenyl)methyl 3-(2,2-dichloroethyl)-2,2-dimethylcyclopropanecarboxylate]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Piperonyl butoxide (51-03-6) ***</td>
<td>= 0.75</td>
<td>None</td>
<td>Established</td>
</tr>
<tr>
<td>[5-2-(2-Butoxyethoxy)ethoxymethyl-6-propyl-1,3-benzodioxole 2-(2-Butoxyethoxy)ethyl 6-propypiperonyl ether alpha-2-(2-Butoxyethoxy)-ethoxy-4,5-methyleneedioxy-2-propyliotolene 3,4-(Methylenedioxy)-6-propylbenzylbutyl diethyleneglycol ether]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Synthetic Isoparaffinic Hydrocarbon (64742-47-8)</strong></td>
<td>&gt; 5</td>
<td>None</td>
<td>Established</td>
</tr>
<tr>
<td><strong>Isobutane (75-28-5)</strong></td>
<td>&gt; 20</td>
<td>None</td>
<td>Established</td>
</tr>
<tr>
<td>[2-Methylpropane 1,1-Dimethylethane Trimethylmethane]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Propane (74-98-6)</strong></td>
<td>&gt; 5</td>
<td>ACGIH TLV-TWA D</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,000 ppm</td>
<td>OSHA PEL-TWA</td>
</tr>
<tr>
<td><strong>Other ingredients (non-hazardous)</strong></td>
<td>&gt; 60</td>
<td>None</td>
<td>Established</td>
</tr>
</tbody>
</table>
** Active Ingredient

** Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling (877) 315-9819 (within the United States) or (651) 632-6184 (outside the United States) at any time.

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**SECTION 3: HAZARDS IDENTIFICATION**

### EMERGENCY OVERVIEW

AN OFF-WHITE AEROSOL.

**CAUTION:**
- TOXIC TO FISH.
- COMBUSTIBLE.
- UNDER PRESSURE.

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**POTENTIAL HEALTH EFFECTS**

**Acute Toxicity (Primary Routes of Exposure):** Inhalation and skin contact.

**Signs and Symptoms of Systemic Effects:** Based on animal studies, symptoms of overexposure to this product include diarrhea, yellow nasal discharge, and activity decrease:

**Eye:** Slightly irritating.

**Skin:** Slightly irritating.

**Ingestion:** Not an expected route of exposure for an aerosol product.

**Inhalation:** Slightly irritating

**Chronic Toxicity (Including Cancer):** A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. Independent and industry toxicological experts who have reviewed the data agree that the findings of the study do not indicate a health risk of human beings.

A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks.
SECTION 4: FIRST AID MEASURES

EMERGENCY NUMBER
(800) 887-3524

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: Call a poison control center or doctor immediately 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 doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move 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 petroleum distillate – vomiting may cause aspiration pneumonia.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Negative

METHOD: TCC

AUTOIGNITION:

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, or Water

FLAMMABLE LIMITS (% by volume in air): Lower: NA Upper: NA

FIRE AND EXPLOSION HAZARDS: Combustible. Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130ºF may cause bursting. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

NFPA RATINGS:
(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement.

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.

HAZARDOUS COMBUSTION PRODUCTS: May form toxic materials: Carbon dioxide and carbon monoxide, various hydrocarbons, etc.
SECTION 6: ACCIDENTAL RELEASE MEASURES

BLACK FLAG EMERGENCY PHONE NUMBER: (800) 887-3524

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION
Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water.

LAND SPILL OR LEAK

CONTAINMENT: Contain spill with absorbent material. Do not allow spill material to enter any body of water.
CLEANUP: If can is punctured or leaking soak up liquid with an absorbent material such as sand, sawdust, earth, fuller’s earth, etc. and dispose of in trash.

FOR SPILLS IN WATER:

CONTAINMENT: 
CLEANUP:

SECTION 7: HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Avoid contamination of feed and foodstuff. Do not use near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

STORAGE PRECAUTIONS: Do not store near heat or open flame. Store in a cool, dry area away from children. Do not transport or store below 32°F.

WORK/HYGIENIC PRACTICES: Wash thoroughly with soap and water after handling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Not required with normal use.

RESPIRATION/VENTILATION: Use in a well ventilated area.

SKIN PROTECTION: Chemical-resistant gloves.

OTHER/GENERAL PROTECTION: None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white liquid (aerosol).

ODOR: Slight odor of insecticide.
MELTING POINT: NA
DENSITY/BULK DENSITY: NA
/SPECIFIC GRAVITY: 0.98 @ 20ºC
SOLUBILITY (H₂O): NA
pH: 7.2
CORROSION CHARACTERISTICS: non-corrosive to tin plate steel
PHYSICAL STATE: Liquid
DENSITY: 86.52 lbs/gal
VISCOSITY: >500 cs @ 21ºC

**SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable
INCOMPATIBILITY:
HAZARDOUS DECOMPOSITION PRODUCTS:
OXIDATION/REDUCTION PROPERTIES:
HAZARDOUS POLYMERIZATION: Will not occur

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE** (Product Specific Information): Only acute dermal has been completed on this product. The remaining acute toxicological data for this formulation were developed with TetraPerm Insect Killer N104 WBA, EPA Reg. No. 73049-332, containing 0.2 Tetramethrin, 0.2 Permethrin and 1.0 Piperonyl Butoxide.

**Eye Irritation**: minimal irritant. (rabbit)

**Skin Irritation (rabbit)**: mild irritating, 2.17 Primary Dermal Irritation Index

**Dermal Toxicity LD₅₀ (rabbit)**: > 5,000 mg/kg

**Oral Toxicity LD₅₀ (rat)**: > 5,000 mg/kg

**Inhalation Toxicity LC₅₀(rat)**: > 4.31 mg/kg

**Skin Sensitization (guinea pig)**: Non-sensitizer

**TOXICITY OF TETRAMETHRIN, PERMETHRIN PIPERONYL BUTOXIDE:**

**SUBCHRONIC:**

**CHRONIC/CARCINOGENICITY**: A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks.

A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. Independent and industry toxicological experts who have reviewed the data agree that the findings of the study do not indicate a health risk to human beings.

**CARCINOGENICITY**: NTP: No IARC: No OSHA: No
SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

AVIAN

AQUATIC

ACUTE AND LONG-TERM TOXICITY TO FISH AND INVERTEBRATES: This product is toxic to fish.

OTHER NON-TARGET ORGANISM TOXICITY:

OTHER ENVIRONMENTAL INFORMATION: Do not discharge effluent containing this product to 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. Do not contaminate water by cleaning of equipment or disposal of wastes.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Check governmental regulations and local authorities for approved disposal of this material. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions.

CONTAINER DISPOSAL: Do not incinerate or puncture. If empty: Place in trash or offer for recycling if available.

RCRA INFORMATION:

RCRA HAZARDOUS WASTE INGREDIENTS:

SECTION 14: TRANSPORT INFORMATION

D.O.T. SHIPPING NAME:
PROPER SHIPPING NAME:
TECHNICAL SHIPPING NAME:
RQ:
D.O.T. HAZARD CLASS:
U.N./N.A. NUMBER:
REMARKS:
EXEMPTION REQUIREMENT:

NO DATA GIVEN
SECTION 15: REGULATORY INFORMATION

REGULATIONS UNDER FIFRA: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

OTHER U.S. FEDERAL REGULATIONS:

OSHA:
CERCLA RQ*:
RCRA**:
SARA TITLE III:
This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>INGREDIENT NAME</th>
<th>PERCENT BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>7696-12-0</td>
<td>Tetramethrin</td>
<td>0.15</td>
</tr>
<tr>
<td>52645-53-1</td>
<td>Permethrin</td>
<td>0.15</td>
</tr>
<tr>
<td>51-03-6</td>
<td>Piperonyl butoxide</td>
<td>0.75</td>
</tr>
</tbody>
</table>

This information must be included on all MSDSs that are copied and distributed for this material.

REGULATED INGREDIENTS

INGREDIENT: Tetramethrin
CAS NUMBER: 7696-12-0
PERCENT BY WEIGHT: = 0.15
Regulations: SARA Section 313 Toxic Chemical

INGREDIENT: Permethrin
CAS NUMBER: 52645-53-1
PERCENT BY WEIGHT: = 0.15
Regulations: Massachusetts Hazardous Substance
New Jersey Workplace Hazardous Substance
SARA Section 313 Toxic Chemical

INGREDIENT: Piperonyl butoxide
CAS NUMBER: 51-03-6
PERCENT BY WEIGHT: = 0.75
Regulations: SARA Section 313 Toxic Chemical

INGREDIENT: Isobutane
CAS NUMBER: 75-28-5
PERCENT BY WEIGHT: > 9
Regulations: Massachusetts Hazardous Substance
New Jersey Environmental Hazardous Substance
New Jersey Special Health Hazardous Substance
New Jersey Workplace Hazardous Substance
Pennsylvania Workplace Hazardous Substance

INGREDIENT: Propane
CAS NUMBER: 74-98-6
Black Flag Kills Ants Roaches Spiders

PERCENT BY WEIGHT: > 5
Regulations: Illinois Toxic Substance
Massachusetts Hazardous Substance
New Jersey Environmental Hazardous Substance
New Jersey Special Health Hazardous Substance
New Jersey Workplace Hazardous Substance
Pennsylvania Workplace Hazardous Substance

Sara (313) Chemicals:
Sara (311,312):
Sare Title III:

Acute Health Hazard
Fire Hazard:
Sudden Release of Pressure:

Sara Section 302:

U.S. STATE REGULATORY INFORMATION

STATE REGULATIONS: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities

* RQ: Reportable Quantity
** RCRA waste codes must be determined on a case-by-case basis (i.e., spill, processing waste, etc.).

For information regarding potential adverse health effects from exposure to this product, refer to Sections 3 and 11.

SECTION 16: OTHER INFORMATION

REASON FOR ISSUE: New company name and new EPA number
REVISION NUMBER: 0
REVISION DATE: September 3, 2003
SUPERSEDES DATE: new
EPA REGISTRY NUMBER: 73049-331
MSDS NUMBER:

HMIS HAZARD RATING - HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- PROTECTION: B

NFPA HAZARD RATING - HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- SPECIAL: -
DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES
This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

THE INFORMATION IN THIS MSDS IS BASED ON DATA AVAILABLE TO US AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT BLACK FLAG BRANDS, LLC. TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.

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