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## MATERIAL SAFETY DATA SHEET

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Black Flag Kills Wasps Hornets Yellow Jackets Scorpions Formula 2  
**Product Codes:** 61119, 61121 (EPA REG. NO. 1021-1852-79529)  
**Product Use:** A Pressurized Aerosol-Insecticide Spray  
**Supplier:** Black Flag Brands, LLC  
**Address:** 3300 Corporate Drive, Joliet, IL 60431  
**Business Phone:** (800) 887-3524 M-F, 8:30 AM – 8 PM EST  
**Medical Emergency:** 1-888-740-8712 (24 Hour)  
**Transportation Emergency:** 1-800-424-9300 (CHEMTREC 24 Hour)  
**Date:** 11/11/2008

### SECTION 2 – HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** CAUTION. Contents under pressure. Do not use or store near heat, sparks, open flame, or any other ignition sources. Do not expose to temperatures above 130°F (54.4°C), as bursting may occur. Harmful if absorbed through the skin. Avoid contact with skin, eyes, and clothing.

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

#### POTENTIAL HEALTH EFFECTS

**EYES:** May cause temporary irritation, tearing, and blurred vision.

**SKIN:** Can 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:** Excessive inhalation of mists can cause nasal and respiratory irritation.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**CHRONIC EFFECTS:** None known.

### SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS

<u>CHEMICAL NAME</u>	<u>WEIGHT %</u>	<u>CAS NUMBER</u>
Pyrethrins	0.025	8003-34-7
Piperonyl Butoxide	0.05	51-03-6
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	0.084	113-48-4
Esfenvalerate	0.05	66230-04-4

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

### SECTION 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.

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## SECTION 5 - FIRE FIGHTING MEASURES

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**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:** 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.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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**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.

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## SECTION 7 – HANDLING AND STORAGE

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**GENERAL PROCEDURES:** DO NOT USE IN OR AROUND ELECTRICAL EQUIPMENT DUE TO THE POSSIBILITY OF SHOCK HAZARD.

**HANDLING:** Contents under pressure -DO NOT puncture or incinerate container. Do not use or store near heat, sparks, open flame, or any other ignition sources. Take prudent precautions to avoid contact with skin, eyes, and clothing. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, food or feedstuffs by storage, handling, or disposal. Read and observe all precautions and instructions on the label.

**STORAGE:** Store in a cool, dry, well-ventilated, preferably locked storage area. Exposure to temperatures above 130°F (54.4°C) may cause bursting. Store containers upright and closed. Keep away from heat, ignition sources, and strong oxidizers. Emptied containers may retain product residues.

KEEP OUT OF REACH OF CHILDREN

**NFPA 30B:** Level 1 Aerosol

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## SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

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### EXPOSURE GUIDELINES:

<u>CHEMICAL NAME</u>		<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>OTHER</u>
Pyrethrins	TWA	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	
Piperonyl Butoxide	TWA	None	None	
MGK®-264 (N-Octyl Bicycloheptene Dicarboximide)	TWA	None	None	
Esfenvalerate	TWA	None	None	supplier recommends 2 mg/m <sup>3</sup> (skin)

**ENGINEERING CONTROLS:** Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

**PERSONAL PROTECTIVE EQUIPMENT EYES AND FACE:** Take prudent precautions to avoid contact with eyes.

**SKIN:** Take prudent precautions to avoid contact with skin and clothing.

**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.

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## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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**PHYSICAL STATE:** Pressurized liquid.

**ODOR:** Slight sweet-smell.

**APPEARANCE:** Milky emulsion.

**pH:** 6.5 (mixture without propellant)

**VAPOR DENSITY:** Heavier than air.

**FREEZING POINT:** Not Available

**SOLUBILITY IN WATER:** Partially miscible in water.

**SPECIFIC GRAVITY:** 0.978 at 20°C (68°F) (mixture without propellant)

**VISCOSITY:** 1591.67 CPS at 24°C (75.2°F) Brookfield (mixture without propellant)

**VOC:** < 1.0 %

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## SECTION 10 – STABILITY AND REACTIVITY

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**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**CONDITIONS TO AVOID:** Not compatible with strong oxidizers.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### ACUTE

**DERMAL LD50:** > 2.0 gm/kg (Albino rabbit)

**ORAL LD50:** 1.1 gm/kg (Albino rat)

**INHALATION LC50:** 4.10 mg/L (Rats exposed for 4 hours to test atmosphere)

**EYE EFFECTS:** Irritation cleared within 48 hours for the un-rinsed eye, and within 24 hours for the rinsed eye.

**SKIN EFFECTS:** No irritation noted at 72 hours. Irritation Index = 0.5

**SENSITIZATION:** May possibly be a weak dermal sensitizer in albino guinea pigs.

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

**CARCINOGENICITY:** 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.

Pyrethrum has been tested in chronic feeding studies in mice and rats. Slightly elevated incidences of benign tumors of the thyroid and liver were seen in rats following high doses of Pyrethrum. Further detailed scientific studies into the mechanism causing these responses indicate that these effects in the animals only occur at doses greatly exceeding the likely human exposure levels. Thus, the effects seen in animals are of little relevance to humans.

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 exceed anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

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## SECTION 12 – ECOLOGICAL INFORMATION

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**ENVIRONMENTAL DATA:** Environmental data not available for this product.

**ECOTOXICOLOGICAL INFORMATION:** This product is toxic to fish and other aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment wash waters or rinsate.

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## SECTION 13 – DISPOSAL CONSIDERATIONS

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**DISPOSAL METHOD:**

IF EMPTY: Place in trash or offer for recycling if available.

IF PARTLY FILLED: Call your local solid waste agency for disposal instructions. Never place 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.

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**SECTION 14 - TRANSPORT INFORMATION**

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**U.S. DOT (ROAD OR RAIL):**

PROPER SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

ID NUMBER:

PACKING GROUP:

**AIR / WATER / INTERNATIONAL TRANSPORT:** NOT AVAILABLE

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

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**SECTION 15 - REGULATORY INFORMATION**

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**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**

**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.

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**SECTION 16 - OTHER INFORMATION**

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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.

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