

# **CROSSFIRE**

bed bug concentrate

Specimen Label

- Kills bed bugs and bed bug eggs
- Fast knockdown and kill
- Kills all bed bug life stages
- Patented technology
- Approved for direct application on mattresses

#### ACTIVE INGREDIENTS:

|                           |         |
|---------------------------|---------|
| Clothianidin .....        | 4.00%   |
| Metofluthrin .....        | 0.10%   |
| Piperonyl Butoxide* ..... | 10.00%  |
| OTHER INGREDIENTS: .....  | 85.90%  |
|                           | 100.00% |

\* (butylcarbityl) (6-propylpiperonyl) ether and related compounds

Contains 0.3409 lb. of Clothianidin, 0.0085 lb. of metofluthrin and 0.8523 lb. of piperonyl butoxide per gallon of concentrate.



## KEEP OUT OF REACH OF CHILDREN

See inside for first aid and precautionary statements.

**PRECAUCIÓN AL CONSUMIDOR:** Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.  
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

**SHAKE WELL BEFORE EACH USE  
FOR INDOOR USE ONLY**

**Crossfire Bed Bug Concentrate** is the next generation insecticide which effectively kills bed bugs in both residential and commercial buildings and structures. **Crossfire Bed Bug Concentrate's** patented technology provides residual control for up to four weeks after application and is scientifically formulated to target pyrethroid resistant, as well as susceptible bed bug strains. **Crossfire Bed Bug Concentrate** also kills bed bug nymphs and eggs by contact. This product must be diluted with water and applied according to the mixing instructions below. Apply **Crossfire Bed Bug Concentrate** as an indoor crack and crevice, or direct spray application in non-food areas including, but not limited to: hotels, shelters, modes of transportation, restaurants, schools, nursing homes, warehouses, offices, apartments, motels, kennels, and hospitals. **Crossfire Bed Bug Concentrate** is an easy to use water-dilutable concentrate for application with handheld or backpack sprayers, or with a paintbrush. This product will not stain water-safe fabrics or surfaces, however care should be taken to test an inconspicuous area for staining prior to use.

**TO KILL BED BUGS (Adults, Nymphs and Eggs):** For best results, vacuuming surfaces is recommended prior to treatment. Spray bed bugs and eggs directly wherever possible. Apply as a pinstream, coarse spray or low pressure spray for crack and crevice, carpet perimeter, and direct spray applications in and around non-food areas where bed bugs and their eggs may hide or harbor. For example, on and around baseboards, floorboards, millwork, bed frames, headboards, wall hangings, furniture, door and window frames, walls, closets, window treatments, beneath floor coverings, as well as other non-washable items that may come in contact with bed bugs such as luggage, shoes and backpacks. If treating a pet's living environment, spray on and around pet beds, bedding, floors, sleeping areas and furnishings. This product can also be applied with a paintbrush to walls, baseboards, floorboards, behind wall hangings and other similar areas.

#### MATTRESS APPLICATION:

**Crossfire Bed Bug Concentrate** can be directly applied to mattress and box spring surfaces. For porous surfaces such as mattresses and carpet perimeter areas, apply until thoroughly damp, but not wet. Infested bed linens should not be treated. These should be removed, tightly sealed in a plastic bag, laundered and dried at high temperatures prior to reuse. Vacuuming surfaces prior to treatment is highly recommended. Using pinstream, coarse or low pressure equipment, spray directly to mattress surface paying special attention to seams, folds, tufts and edges as well as bed frames and box springs where bed bugs harbor. Re-make bed with clean linens prior to reuse.

#### USE RESTRICTIONS:

• THIS PRODUCT IS NOT FOR USE ON HUMANS OR ANIMALS.

- Do not spray product directly on pets.
- Not for broadcast use.
- Do not use in commercial food/feed processing, preparation, food/feed storage or serving areas.
- In the home, all food/feed processing surfaces and utensils should be covered during treatment, or thoroughly washed before use. Cover or remove exposed food/feed.
- Remove pets, birds and cover fish aquariums before spraying.
- This product will not stain water-safe fabrics and surfaces, however care should be taken to test an inconspicuous area for staining prior to use.
- DO NOT allow adults, children or pets to enter treated area until sprays are dry.
- DO NOT apply to plants or crops.
- DO NOT treat areas when occupants are present.
- DO NOT apply as a space spray.
- DO NOT wet articles to the point of runoff or drip.
- DO NOT use treated articles until spray has dried.



## MIXING INSTRUCTIONS

### • 130 FL. OZ. CONTAINER:

**Crossfire Bed Bug Concentrate** is packaged in a 130 fl. oz. container to produce exactly 10 finished gallons (10 doses/treatments). Pour 13 fl. oz. of the 130 fl. oz. container into 115 oz. of water to produce exactly 1 finished gallon to treat 1,000 sq. ft.

### • 13 FL. OZ. CONTAINER:

**Crossfire Bed Bug Concentrate** is conveniently packaged in a single dose 13 fl. oz. container. Pour the entire contents of the 13 fl. oz. container into 115 oz. of water to produce exactly 1 finished gallon to treat 1,000 sq. ft.

| Dilution in water<br>Active Ingredients | 13 fl. oz. per Gallon<br>Final percent concentration of active ingredients |
|-----------------------------------------|----------------------------------------------------------------------------|
| Clothianidin                            | 0.40%                                                                      |
| Metofluthrin                            | 0.01%                                                                      |
| Piperonyl Butoxide                      | 1%                                                                         |
| Total percent concentration of actives  | 1.42%                                                                      |

| Pests    | Dilution in water          | Application Rate<br>of Mixed Solution | Application Method(s)                           |
|----------|----------------------------|---------------------------------------|-------------------------------------------------|
| Bed Bugs | 13 fl. oz./Finished Gallon | 1 Gallon/1,000 sq. ft.                | Apply as a coarse wet spray<br>• Spot Treatment |

Crossfire Bed Bug Concentrate may also be mixed to varying final dilution volumes to treat smaller or larger treatment areas according to the following table:

| Dilution Chart for Equivalent of 1.42% Concentration of Total Actives |                    |                                            |                                       |
|-----------------------------------------------------------------------|--------------------|--------------------------------------------|---------------------------------------|
| Volume of<br>Finished Mix                                             | Volume<br>of Water | Volume of Crossfire<br>Bed Bug Concentrate | Application Rate<br>of Mixed Solution |
| 16 fl. oz.                                                            | 14.4 fl. oz.       | 1.6 fl. oz.                                | 125 sq. ft.                           |
| 1.0 qt.                                                               | 28.8 fl. oz.       | 3.2 fl. oz.                                | 250 sq. ft.                           |
| 0.5 gal.                                                              | 57.5 fl. oz.       | 6.5 fl. oz.                                | 500 sq. ft.                           |
| 1.0 gal.                                                              | 115.0 fl. oz.      | 13.0 fl. oz.                               | 1,000 sq. ft.                         |
| 1.5 gal.                                                              | 172.5 fl. oz.      | 19.5 fl. oz.                               | 1,500 sq. ft.                         |

To prepare the diluted spray, fill the sprayer tank with half the total water to be used, add the **Crossfire Bed Bug Concentrate** then add the remaining water to the spray tank to achieve the final application volume. Close the spray tank and shake thoroughly to ensure proper suspension. For optimal results, solution should be used within 24 hours of being prepared. Spray tank solution should be shaken prior to each use or if application is interrupted. Diluted mixture may be stored overnight.

**NOTICE:** This product may be tank mixed with other insecticides. Application must conform to the use directions and precautions of both products. Prior to tank mixing, a small jar compatibility test should be conducted using the proper proportions of each product and water to ensure the physical compatibility of the mixture. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

## FIRST AID

### IF IN 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 eyes.
- Call a poison control center for treatment advice.

### IF ON SKIN OR CLOTHING:

- 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.

### HOTLINE NUMBER:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product (including health concerns, medical emergencies or pesticide incidents), you may call 1-888-740-8712.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt,
- Long pants, and
- Shoes and socks.

### USER SAFETY REQUIREMENTS:

- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Don't reuse them.

### PHYSICAL OR CHEMICAL HAZARDS:

Do not apply this product in, on or around electrical equipment due to the possibility of shock hazard.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

### PESTICIDE STORAGE:

Store product in its original container. Store in a cool, dry place and avoid excess heat. Keep container tightly closed when not in use. Keep product from freezing. Diluted mixture may be stored overnight.

### PESTICIDE DISPOSAL AND CONTAINER HANDLING:

Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying.

Triple rinse as follows: 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  $\frac{1}{4}$  full with water and recap. 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, then offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by other approved State or local procedures.





Insect Control Solutions

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Version: 3

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Name:** Crossfire® Bed Bug Concentrate

**EPA Registration Number:** 1021-2776

### Other means of identification

**Part Code:** 3071

**Other Information:** Crossfire® is a registered trademark of Sumitomo Chemical Co., Ltd.

### Recommended use of the chemical and restrictions on use:

**Recommended Use:** Insecticide.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address:**

McLaughlin Gormley King Company

7325 Aspen Lane North

Minneapolis, MN 55428

**Telephone Number:** (800) 645-6466, or (763) 544-0341

**e-Mail Address:** mgk-sds@mgk.com

#### **FAX #:**

(763) 544-6437

### Emergency telephone numbers:

**24 Hour TRANSPORTATION Emergency:** CHEMTREC®: (800) 424-9300

**International:** (703) 527-3887

**24 Hour MEDICAL Emergency:** SafetyCall®: (888) 740-8712, or (952) 852-9509

**Comments:** MGK® Hours of operation are 8:00 a.m. to 4:30 p.m. CST, 14:00 to 22:30 GMT.  
For MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call 24 hours a day to  
(888) 740-8712, or (952) 852-9509.

## 2. HAZARDS IDENTIFICATION

### Classification:

#### **OSHA Regulatory Status:**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

### Label elements

#### **Emergency Overview**

### **WARNING**

#### **Hazard statements**

• H332 - Harmful if inhaled



**Appearance:** White , cream**Physical state:** Liquid**Odor** Sweet**Precautionary Statements - Prevention:**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response:**

P321 - Specific treatment (see Section 4/ First Aid).

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage:**

P404 - Store in a closed container

**Precautionary Statements - Disposal:**

P501 - Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC):**

Do not use this product in or on electrical equipment due to the possibility of shock hazard.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

| Chemical Name            | CAS No.     | Weight-% |
|--------------------------|-------------|----------|
| Metofluthrin             | 240494-70-6 | 0.100    |
| Clothianidin             | 210880-92-5 | 4.00     |
| Piperonyl Butoxide (PBO) | 51-03-6     | 10.0     |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

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

**4. FIRST AID MEASURES****Aspiration pneumonia hazard:** • No information available**Description of first aid measures:****Eye contact:**

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 Contact:**

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.

**Self-protection of the First Responder:**

Use personal protective equipment as required.

**Note to physicians:**

For skin effects, a highly efficient therapeutic agent for Pyrethrin/ Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:**

Caution: Use of water spray when fighting fire may be inefficient.

**Hazardous combustion products:** Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

**Sensitivity to Mechanical Impact:** None.

**Sensitivity to Static Discharge:** None.

**Protective equipment and precautions for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

Health hazards 2

Flammability 1

Instability 0

Physical and  
Chemical Properties

**HMIS**

Health hazards 1

Flammability 1

Physical hazards 0

Personal protection  
X

**Chronic Hazard Star Legend**

\* = Chronic Health Hazard

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures****Personal precautions:**

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up****Methods for containment:**

Prevent further leakage or spillage if safe to do so.



**Methods for cleaning up:** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling:** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. For more information, see product label.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions:** Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. For more information, see product label.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines:** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls:** Safety showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Protective eyewear is recommended, but is not required.

**Skin and body protection:** Protective gloves are recommended, but are not required.

**Respiratory protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations:** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties:

**Physical state:** Liquid  
**Appearance:** White, cream  
**Odor:** Sweet  
**Odor threshold:** No information available  
**Color (Gardner Scale):** No information available

| <u>Property:</u>                            | <u>Values:</u>                | <u>Comment: • Method</u>    |
|---------------------------------------------|-------------------------------|-----------------------------|
| pH:                                         | 4.90                          | @ 5% in H <sub>2</sub> O. . |
| Melting point / freezing point:             | No information available      |                             |
| Boiling point / boiling range:              | No information available      |                             |
| Flash point:                                | > 93.3 °C / > 200.0 °F        | Tag Closed Cup;             |
| Evaporation rate:                           | No information available      |                             |
| Flammability (solid, gas):                  | No information available      |                             |
| Upper flammability limit (UEL):             | No information available      |                             |
| Lower flammability limit (LEL):             | No information available      |                             |
| Vapor pressure:                             | No information available      |                             |
| Vapor density:                              | No information available      |                             |
| Specific Gravity:                           | 1.0281 @ 20.0 °C              |                             |
| Water solubility:                           | No information available      |                             |
| Partition coefficient; n-Octanol/<br>Water: | No information available      |                             |
| Autoignition temperature:                   | No information available      |                             |
| Decomposition temperature:                  | No information available      |                             |
| Kinematic viscosity:                        | No information available      |                             |
| Dynamic viscosity:                          | 29.5 @ 20°C, 22.0 @ 40°C, cPs |                             |
| Refractive Index:                           | No information available      |                             |
| <u>Other Information:</u>                   |                               |                             |
| VOC Content (%):                            | 0.29                          |                             |
| <u>Miscibility/ Solubility:</u>             |                               |                             |
| Water:                                      | Miscible                      |                             |
| Alcohol                                     | Miscible                      |                             |
| Aromatic solvents:                          | Partially miscible            |                             |
| Petroleum distillates:                      | Immiscible                    |                             |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available .

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization:** Hazardous polymerization does not occur.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials:

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION



**Numerical measures of toxicity - Product Information**

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Oral LD<sub>50</sub></b>           | >5,000 mg/kg (rat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Dermal LD<sub>50</sub></b>         | >5,000 mg/kg (rabbit)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Inhalation LC<sub>50</sub></b>     | >2.15 mg/L, (rat; 4 hours)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Eye contact:</b>                   | Non-irritating to eyes. (rabbit).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Skin Contact:</b>                  | Non-irritating to the skin. (rabbit).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Sensitization:</b>                 | Non-sensitizer. (guinea pig).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Piperonyl Butoxide:</b>            | 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. |
| <b>Carcinogenicity/ Oncogenicity:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Carcinogenicity</b>                | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reproductive toxicity:</b>         | No information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Developmental Toxicity</b>         | No information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Teratogenicity:</b>                | No information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>STOT - single exposure:</b>        | No information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>STOT - repeated exposure:</b>      | No information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Chronic toxicity:</b>              | Avoid repeated exposure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**12. ECOLOGICAL INFORMATION****Ecotoxicity:****Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects:** No information available**Environmental hazards (EPA):**

Do not discharge effluent containing this product into 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.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes:** Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.

**Contaminated packaging:** For more information, see product label.



|                                  |
|----------------------------------|
| <b>14. TRANSPORT INFORMATION</b> |
|----------------------------------|

**DOT (Department of Transportation)**

**Proper Shipping Name:** Insecticides, Insect or Animal Repellent, Liquid  
**Hazard Class:** This material is not hazardous.

**Other Shipping Information:** This material is **not** regulated by the DOT as a hazardous material when shipped in Non-Bulk quantities (*i.e.*, less-than 119 Gallons / 450 Liters).

When shipping in Bulk-quantities (*i.e.*, more than 119 Gallons / 450 Liters), please contact MGK® for the proper shipping description.

**Air (IATA/ ICAO)**

**Proper Shipping Name:** Insecticides, Insect or Animal Repellent, Liquid  
**Hazard Class:** This material is not hazardous.

**Vessel (IMO/ IMDG)** Not available

|                                   |
|-----------------------------------|
| <b>15. REGULATORY INFORMATION</b> |
|-----------------------------------|

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                      | SARA 313 - Threshold Values % |
|------------------------------------|-------------------------------|
| Piperonyl Butoxide (PBO) - 51-03-6 | 1.0                           |

**SARA 311/312 Hazard****Categories**

|                                          |     |
|------------------------------------------|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations:****California Proposition 65:**

This product does not contain any Proposition 65 chemicals

**U.S. EPA Label Information:****EPA Registration Number:** 1021-2776**Difference between SDS and EPA (FIFRA) Pesticide label:**

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 (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:

**International:**

|                      |                 |
|----------------------|-----------------|
| <b>TSCA</b>          | Complies        |
| <b>DSL/NDSL</b>      | Complies        |
| <b>EINECS/ELINCS</b> | Does not comply |
| <b>ENCS</b>          | Does not comply |
| <b>IECSC</b>         | Does not comply |
| <b>KECL</b>          | Does not comply |
| <b>PICCS</b>         | Does not comply |
| <b>AICS</b>          | Does not comply |

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION.****Issue Date:**  
02-Mar-2018**Revision Date:**  
02-Mar-2018**Revision Note:**  
- SDS sections updated  
- 2  
- 8  
- 9  
- 15  
- 16**SDS Prepared By:**  
e-Mail Address:Troy Azzivitto, MGK® Chemistry Department.  
mgk-sds@mgk.com**Disclaimer:**

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, MGK® and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither MGK® nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label,



it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact MGK® to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS 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 as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). The product label provides 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 FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

**End of Safety Data Sheet.**



**ACTIVE INGREDIENTS:**

|                        |         |
|------------------------|---------|
| Clothianidin.....      | 4.00%   |
| Metolifluthrin.....    | 0.10%   |
| Piperonyl Butoxide*    | 10.00%  |
| OTHER INGREDIENTS..... | 85.90%  |
|                        | 100.00% |

\* (butylcarbitol) (5-propylpiperonyl) ether and related compounds  
Contains 0.3409 lb. of Clothianidin, 0.0085 lb of metolifluthrin and  
0.8523 lb of piperonyl butoxide per gallon of concentrate.

**PRECAUTIONAL CONSUMIDOR:** Si usted no lee ingles, no  
use este producto hasta que la etiqueta le haya sido explicada  
ampliamente.

**(TO THE USER:** if you cannot read English, do not use this product  
until the label has been fully explained to you.)

**KEEP OUT OF REACH OF CHILDREN**

**FIRST AID**

|                                |                                                                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IF IN EYES:</b>             | • Hold eye open and rinse slowly and gently with water for 15-20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.<br>• Call a poison control center for treatment advice. |
| <b>IF ON SKIN OR CLOTHING:</b> | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15-20 minutes.<br>• Call a poison control center or doctor for treatment advice.                                                          |

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product (including health concerns, medical emergencies or pesticide incidents), you may call 1-888-740-8712.

Classified for  
"RESTRICTED USE"  
in New York State.

**PRECAUTIONARY STATEMENTS** under 6 NYCRR Part 326

**Hazards to Humans and Domestic Animals**

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Personal Protective Equipment (PPE)**

- Applicators and other handlers must wear:  
• Long-sleeved shirt  
• Long pants, and  
• Shoes and socks

**User Safety Requirements**

- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Don't reuse them.

**Physical And Chemical Hazards**

Do not apply this product in, on or around electrical equipment due to the possibility of shock hazard.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**SEE INSIDE BROCKET FOR DIRECTIONS FOR USE**

**SHAKE WELL BEFORE EACH USE**

ACCEPTED

VIA NOTIFICATION  
LABEL NOT REVIEWED

SEP 17 2015

Manufactured By:



8810 Tenth Avenue North • Minneapolis, MN 55427

New York State Department  
of Environmental Conservation  
Division of Materials Management  
Pesticide Product Registration

EPA Reg. No. 1021-2776

EPA Est. No. 1021-MN-24,

63416-MN-19, 70815-GA-15,

228-IL-0020

Rev. 12/14-0215

F3071-128

**NET CONTENTS 130 fl. oz.**

Doc ID: 543296



| FIRST AID                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>If in Eyes:</b>                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li> <li>• Call a poison control center for treatment advice.</li> </ul> |
| <b>If on Skin or Clothing:</b>                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>                                                          |
| <b>HOT LINE NUMBER</b>                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                |
| Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product (including health concerns, medical emergencies or pesticide incidents), you may call 1-888-740-8712. |                                                                                                                                                                                                                                                                                                |

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants, and
- Shoes and socks

#### User Safety Requirements

- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Don't reuse them.

#### Physical And Chemical Hazards

Do not apply this product in, on or around electrical equipment due to the possibility of shock hazard.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

#### SHAKE WELL BEFORE EACH USE

#### FOR INDOOR USE ONLY

Crossfire® Bed Bug Concentrate is the next generation insecticide which effectively kills *Bed Bugs* in both residential and commercial buildings and structures. Crossfire Bed Bug Concentrate's patented technology provides residual control for up to four weeks after application and is scientifically formulated to target resistant as well as susceptible *Bed Bug* strains. Crossfire Bed Bug Concentrate also kills *Bed Bug Nymphs* and *Eggs* by contact. This product must be diluted with water and applied according to the mixing instructions below. Apply Crossfire Bed Bug Concentrate as an indoor crack and crevice, or direct spray application in non-food areas including but not limited to: hotels, shelters, modes of transportation, restaurants, schools, nursing homes, warehouses, offices, apartments, motels, kennels, and hospitals. Crossfire Bed Bug Concentrate is an easy to use water-dilutable concentrate for application with hand-held, backpack or with a paintbrush. This product will not stain water-safe fabrics or surfaces, however care should be taken to test an inconspicuous area for staining prior to use.

**TO KILL *Bed Bugs* Adults, Nymphs and Eggs:** For best results, vacuuming surfaces is recommended prior to treatment. Spray *bed bugs* and eggs directly wherever possible. Apply as a miststream, coarse spray or low pressure spray for crack and crevice, carpet perimeter, and direct spray applications in and around non-food areas where *bed bugs* and their eggs may hide or harbor. For example, on and around baseboards, floorboards, millwork, bed frames, headboards, wall hangings, furniture, door and window frames, walls, closets, window treatments, beneath floor coverings, as well as other non-washable items that may come in contact with *bed bugs* such as luggage, shoes, backpacks. If treating a pet's living environment, spray on and around pet beds, bedding, floors, sleeping areas and furnishings. This product can also be applied with a paintbrush to walls, baseboards, floorboards, behind wall hangings and other similar areas.

**MATRESS APPLICATION:** Crossfire Bed Bug Concentrate can be directly applied to mattress and box springs surfaces. For porous surfaces such as mattresses and carpet perimeter areas, apply until thoroughly damp but not wet. Infested bed linens should not be treated. These should be removed, tightly sealed in a plastic bag, laundered and dried at high temperatures prior to re-use. Vacuuming surfaces prior to treatment is highly recommended. Using miststream, coarse or low pressure equipment, spray directly to mattress surface paying special attention to seams, folds, tufts and edges as well as bed frames and box springs where *bed bugs* harbor. Re-make bed with clean linens prior to reuse.

## USE RESTRICTIONS

### THIS PRODUCT IS NOT FOR USE ON HUMANS OR ANIMALS

- Do not spray product directly on pets.
- Do not use in commercial food/feed processing, preparation, food/feed storage or serving areas.
- Do not use in commercial food/feed processing surfaces and utensils should be covered during treatment, or thoroughly washed before use. Cover or remove exposed food/feed.
- In the home, all food/feed processing surfaces and utensils should be covered during treatment, or thoroughly washed before use. Cover or remove exposed food/feed.
- Remove pets, birds and cover fish aquariums before spraying.
- This product will not stain water-safe fabrics and surfaces, however care should be taken to test an inconspicuous area for staining prior to use.
- DO NOT allow adults, children or pets to enter treated area until sprays are dry.
- DO NOT apply to plants or crops.
- DO NOT treat areas when occupants are present.
- DO NOT apply as a space spray.
- DO NOT wet articles to the point of runoff or drip.
- DO NOT use treated articles until spray has dried.

## MIXING INSTRUCTIONS

Crossfire Bed Bug Concentrate is packaged in a 130 fluid ounce container to produce exactly 10 finished gallons (10 doses/treatments). Pour 13 fl. oz. of the 130 fl. oz. container into 115 ounces of water to produce exactly 1 finished gallon to treat 1,000 sq. ft.

| Dilution in water                      |                            | 13 fl. oz. per Gallon                             |
|----------------------------------------|----------------------------|---------------------------------------------------|
| Active ingredients                     |                            | Final percent concentration of active ingredients |
| Clothianidin                           |                            | 0.40%                                             |
| Metofluthrin                           |                            | 0.01%                                             |
| Piperonyl Butoxide                     |                            | 1%                                                |
| Total percent concentration of actives |                            | 1.42%                                             |
| Pests                                  |                            | Application Method(s)                             |
| Bed Bugs                               | 13 fl. oz./Finished Gallon | 1 Gallon/1000 sq. ft.<br>• Spot Treatment         |

To prepare the diluted spray, fill the sprayer tank with half the total water to be used, add the Crossfire Bed Bug Concentrate then add the remaining water to the spray tank to achieve the final application volume. Close the spray tank and shake thoroughly to insure proper suspension. For optimal results, solution should be used within 24 hours of being prepared. Spray tank solution should be shaken prior to each use or if application is interrupted. Diluted mixture may be stored overnight.

**NOTICE:** This product may be tank-mixed with other insecticides. Application must conform to the use directions and precautions of both products. Prior to tank mixing, a small jar compatibility test should be conducted using the proper proportions of each product and water to ensure the physical compatibility of the mixture. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store product in its original container. Store in a cool, dry place and avoid excess heat. Keep container tightly closed when not in use. Keep product from freezing. Diluted mixture may be stored overnight.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. In case of spill or leak on floor or paved surfaces absorb with sawdust or other commercially available absorbing material, sweep up and remove to chemical waste area until proper disposal can be made.

**Pesticide Disposal And Container Handling:** Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: 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 recap. Shake for 10 seconds. Pour rinse into application equipment or a mix tank or store rinse for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the procedure two more times, then offer for recycling, if available or puncture and dispose of in a sanitary landfill or by other approved State or local procedures.

## NOTICE TO USER

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.



- Kills All Bed Bug Life Stages: Adults, Nymphs And Eggs
- Prevents Pyrethroid-Resistant And Susceptible Bed Bug Egg Hatch
- Quick Knockdown And Kill
- Approved For Direct Application Onto Mattresses
- For Use In Residential, Institutional And Commercial Facilities

**SHAKE WELL BEFORE EACH USE**

### ACTIVE INGREDIENTS:

|                          |         |
|--------------------------|---------|
| Clothianidin.....        | 4.00%   |
| Metoluthrin.....         | 0.10%   |
| Piperonyl Butoxide*..... | 10.00%  |
| OTHER INGREDIENTS:.....  | 85.90%  |
|                          | 100.00% |

\* (butylcarbyl) (6-propylpiperonyl) ether and related compounds  
Contains 0.3409 lb. of Clothianidin, 0.0085 lb of metoluthrin and 0.8523 lb of piperonyl butoxide per gallon of concentrate.

## KEEP OUT OF REACH OF CHILDREN

See Inside Booklet For First Aid, Precautionary Statements, and Directions For Use

**NET CONTENTS 130 fl. oz.**

EPA Reg. No. 1021-2776

EPA Est. No. 1021-MN-2A, 63416-MN-18,  
70815-GA-15, 228-IL-0029

Rev. 1214-0215

Patent 8,889,721

F3071-128

Manufactured by  
8810 Tenth Avenue North, Minneapolis, MN 55427





# CROSSFIRE®

bed bug concentrate

CrossFire® Concentrate brings two new actives to the fight against bed bug infestations. The result is fast knockdown and kill with direct spraying. Plus residual control. CrossFire targets all bed bug life stages (adult, nymphs and eggs) and is scientifically formulated to kill pyrethroid-resistant bed bug strains.

- Kills bed bugs and bed bug eggs
- Accepted for direct application on mattresses
- Multi-mode action and control
- Direct contact provides control in less than 5 minutes with direct spraying as shown by independent testing
- No signal word

## Product Specifications

|                                       |                                                                                                                                                                                                            |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Signal Word</b>                    | None                                                                                                                                                                                                       |
| <b>Packaging</b>                      | 13 oz. bottle (10 per case)<br>130 oz. bottle (2 per case)                                                                                                                                                 |
| <b>EPA Registration Number</b>        | 1021-2776                                                                                                                                                                                                  |
| <b>Food Handling</b>                  | Not for use in food handling areas                                                                                                                                                                         |
| <b>Stability of Undiluted Product</b> | Chemically Stable                                                                                                                                                                                          |
| <b>Stability of Diluted Product</b>   | Chemically Stable                                                                                                                                                                                          |
| <b>Appearance</b>                     | White, milky liquid                                                                                                                                                                                        |
| <b>Odor</b>                           | Slight sweet smell                                                                                                                                                                                         |
| <b>Active Ingredients</b>             | Clothianidin, Metofluthrin and Piperonyl Butoxide                                                                                                                                                          |
| <b>Flammability</b>                   | Not classified as a combustible or flammable liquid by OSHA                                                                                                                                                |
| <b>Mode of Action</b>                 | Sodium channel modulator – disrupts insects' nervous system<br>Binds to the nicotinic acetylcholine receptors – disrupts insects' nervous system<br>Interference with P-450 mediated detoxification system |
| <b>Class of Chemistry</b>             | Pyrethroid, neonicotinoid, synergist                                                                                                                                                                       |
| <b>Respirator Required</b>            | Not required                                                                                                                                                                                               |
| <b>Mix or Dilute in</b>               | Water only                                                                                                                                                                                                 |
| <b>Activity</b>                       | Contact kill, residual activity                                                                                                                                                                            |
| <b>Shelf Life</b>                     | 3 years or more if stored at room temperature                                                                                                                                                              |



## Use Areas

### Indoors in the Home and Non-food Areas, such as:

Restaurants  
Schools  
Warehouses  
Offices  
Apartments  
Hotels  
Nursing homes  
Hospitals  
Kennels

### In Pet Areas

Pet sleeping quarters  
Pet bedding  
Floor and floor coverings where pets are kept

### Where Bed Bugs Hide

Mattresses  
Box springs  
Headboards  
Walls  
Floors  
Baseboards

### Not for Use on Humans or Animals

### Key Target Pests Controlled

Bed Bugs

TECHNICAL BULLETIN



## Method of Application

- Apply with handheld, backpack or with a paintbrush
- Use indoor crack and crevice or direct spray application in non-food areas

## Best Practices when using CrossFire® Insecticide Bed Bug Concentrate

### Effective Bed Bug Application

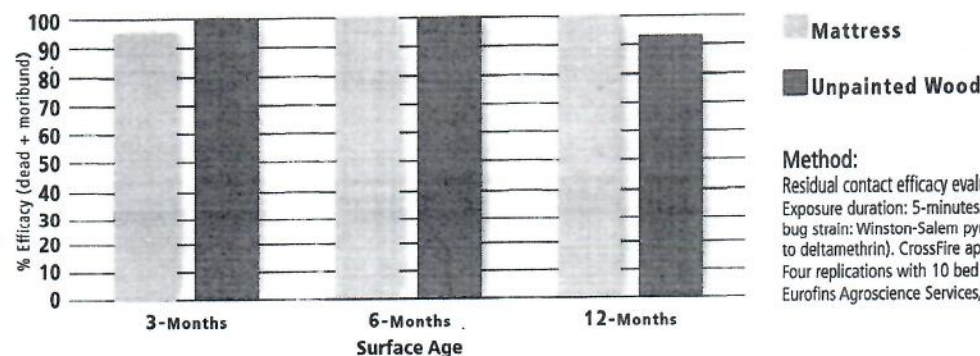
For best results, in addition to treatment with CrossFire Insecticide Bed Bug Concentrate, pest control professionals should include tactics such as those listed below:

- Thoroughly inspect the premise for potential harborage sites. Besides common harborage sites associated with sleeping areas, bed bugs can harbor in many other areas, such as those listed below. The identification and treatment of all harborage sites is the foundation of successful bed bug control.
  - Behind wall hangings, pictures and mirrors
  - Behind electrical switch plates
  - In electronics such as radios and alarm clocks
  - Under rugs and floor coverings
  - In all nooks and crannies of nightstands
  - All parts of beds; headboards, footboards, mattresses, box springs, frames
- Bed bugs are commonly found in adjacent units to the one being treated. Therefore, if it is possible, inspect the adjacent units (next, across, above and below) for bed bug infestations.
- Address if clutter is present within the premise. Be aware that in many cases clutter also provides harborage sites for bed bugs. The inspection of clutter allows the identification of additional bed bug populations present in the area. Once disturbed, bed bugs could disperse away from the clutter, creating additional pockets of infestation. In addition, bed bugs can be easily moved along with the clutter so create a plan in advance on how to treat and/or avoid spreading bed bugs into new areas of the home while working with the clutter.
- Laundering: seal infested items into a plastic bag to avoid spreading bed bugs within the home. Carefully empty the bag containing infested items into the laundry and then place the bags into a clean bag for disposal. Do not reuse the bags used to transport infested items. Wash and dry on high heat for 30 minutes to kill all bed bugs.
- Dispose of infested items that can be discarded.

### Test the surface first

CrossFire Concentrate will not stain water-safe fabrics and surfaces. To make sure a surface is water-safe, apply in an inconspicuous area to test for possible staining or discoloration. Check after product has dried; if staining has not occurred, apply product to the treatment area.

### Residual efficacy of CrossFire on two common surfaces against bed bugs, *Cimex lectularius* (Winston-Salem pyrethroid resistant strain)



#### Method:

Residual contact efficacy evaluation on mattress and unpainted wood. Exposure duration: 5-minutes. Target species: bed bug, *Cimex lectularius*. Bed bug strain: Winston-Salem pyrethroid resistant strain (RR=440-fold resistance to deltamethrin). CrossFire application: 1 gallon of finished dilution/1,000 ft<sup>2</sup>. Four replications with 10 bed bugs per replication. Performing Laboratory: Eurofins Agroscience Services, Inc. (2014).

Always read and follow label and SDS directions.

To learn more, visit [www.mgk.com](http://www.mgk.com), call 1-800-645-6466 or send an e-mail to [brands@mgk.com](mailto:brands@mgk.com).



8810 Tenth Avenue North, Minneapolis, MN 55427  
2.5M-0816



Manufactured by MGK®.  
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*Insect Control Solutions*

# FICHA DE DATOS DE SEGURIDAD

Fecha de publicación:  
02-mar-2018

Fecha de revisión: 02-mar-2018

Versión: 3

## 1. IDENTIFICACIÓN DEL PRODUCTO Y DE LA EMPRESA

### Identificador del producto

Nombre Del Producto: Crossfire® Bed Bug Concentrate

Número de registro de la EPA: 1021-2776

### Otros medios de identificación

Código de la unidad: 3071

Otra información: Crossfire® es una marca comercial registrada de Sumitomo Chemical Co., Ltd.

### Uso recomendado del producto químico y restricciones de uso:

Uso recomendado: Insecticida.

### Datos del proveedor de la ficha de datos de seguridad

#### Dirección del fabricante:

McLaughlin Gormley King Company

7325 Aspen Lane North

Minneapolis, MN 55428

Número de teléfono de la

empresa:

Dirección de correo electrónico mgk-sds@mgk.com

#### FAX #:

(763) 544-6437

(800) 645-6466, o (763) 544-0341

### Teléfonos de emergencia:

24 horas Transporte de emergencia: CHEMTREC®: (800) 424-9300

Internacionales: (703) 527-3887

24 horas emergencia médica: SafetyCall®: (888) 740-8712, o (952) 852-9509

### Comentarios:

MGK® Las horas hábiles son de 08:00 a 16:30 CST, 14:00 a 22:30 GMT.

Para obtener información en caso de EMERGENCIAS MÉDICAS o INCIDENTES

CON PESTICIDAS, llame las 24 horas del día al 1-888-740-8712, o al +1 (1)

952-852-9509 fuera de EE.UU. y Canadá.

## 2. IDENTIFICACIÓN DE LOS PELIGROS

### Clasificación

#### Estatus normativo según la OSHA:

Este producto químico se considera peligroso de acuerdo con la Norma de comunicación de peligros OSHA de 2012 (29 CFR 1910.1200).

Toxicidad aguda - Inhalación (polvo/niebla)

Categoría 4

### Elementos de la etiqueta

#### Información general de emergencia

#### Atención

**Indicaciones de peligro**

- H332 - Nocivo en caso de inhalación

**Aspecto:** Blanco , crema**Estado físico:** Líquido**Olor** dulce**Consejos de prudencia - Prevención:**

- P261 - Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol  
P271 - Utilizar únicamente en exteriores o en un lugar bien ventilado

**Consejos de Prudencia - Reacción:**

- P321 - Se necesita un tratamiento específico (véase la Sección 4 / Primeros Auxilios).  
P304 + P340 - EN CASO DE INHALACIÓN: Transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar  
P312 - Llamar a un CENTRO DE INFORMACION TOXICOLOGICA o a un médico en caso de malestar

**Consejos de prudencia - Almacenamiento:**

- P404 - Almacenar en un recipiente cerrado

**Consejos de prudencia - Eliminación:**

- P501 - Eliminar el contenido/el recipiente en un vertedero autorizad

**Peligros no clasificados de otra manera (HNOC):**

No aplique este producto alrededor de equipo electrico debido al peligro de descarga eléctrica.

**3. COMPOSICIÓN/INFORMACIÓN SOBRE LOS COMPONENTES**

| Nombre químico                                                                         | CAS No.     | % en peso |
|----------------------------------------------------------------------------------------|-------------|-----------|
| Metofluthrin                                                                           | 240494-70-6 | 0.100     |
| Clotianidin                                                                            | 210880-92-5 | 4.00      |
| Butoxido de Piperonilo { 1,3-Benzodioxol, 5-[[2-(2-butoxietoxi)etoxi]metil]-6-propil-} | 51-03-6     | 10.0      |

\*El porcentaje exacto (concentración) de la composición se ha retenido como secreto comercial.

Comentarios: Los ingredientes no identificados están patentados o no son peligrosos. Los valores no son parte de las especificaciones del producto.

**4. PRIMEROS AUXILIOS****Peligro por aspiración:**

- No hay información disponible

**Descripción de los primeros auxilios:****Contacto con los ojos:**

Mantenga los ojos abiertos y enjuague lenta y suavemente con agua por 15 a 20 minutos. Remueva lentes de contacto, si los hay, después de los primeros 5



minutos, luego continúe enjuagando el ojo. Llame al centro de información toxicológica o a un doctor para consejos de tratamiento.

**Contacto con la piel:**

Quite la ropa contaminada. Lave la piel inmediatamente con abundante agua por 15 a 20 minutos. Llame al centro de información toxicológica o a un doctor para consejos de tratamiento.

**Ingestión:**

En caso de ingestión, obtenga INMEDIATAMENTE asesoría de tratamiento llamando a un centro de control de venenos o a un médico. Si la persona afectada puede tragar, dele de beber sorbos de agua. No induzca el vómito, a menos que así lo indique un centro de control de venenos o un médico. No suministre nada por vía oral a una persona inconsciente.

**Inhalación:**

Retire a la persona afectada al aire libre. Si ha dejado de respirar llame a una ambulancia o al centro de información toxicológica, luego proporcione respiración artificial, preferiblemente boca a boca si es posible. Llame al centro de información toxicológica o a un doctor para consejos de tratamiento.

**Autoprotección de la primera respondedor:**

Utilizar el equipo de protección individual obligatorio.

**Nota para el personal médico:**

En caso de efectos cutáneos, la aplicación tópica de acetato de tocoferol (Vitamina E) es un método terapéutico altamente eficiente contra la exposición a las piretrinas.

## 5. MEDIDAS DE LUCHA CONTRA INCENDIOS

**Medios de extinción apropiados**

Utilizar medidas de extinción adecuadas a las circunstancias locales y al entorno.

**Medios de extinción no apropiados:**

Precaución: El uso de rocío de agua luchar contra el fuego puede ser ineficiente.

**Productos de combustión peligrosos:** Monóxido de carbono, Dióxido de carbono (CO<sub>2</sub>).

**Peligros específicos que presenta el producto químico**

No hay información disponible.

**Datos de explosión**

**Sensibilidad a impactos mecánicos:** Ninguno/a.

**Sensibilidad a descargas estáticas:** Ninguno/a.

**Equipo de protección y medidas de precaución para el personal de lucha contra incendios:**

Como en cualquier incendio, llevar un aparato de respiración autónomo de presión a demanda MSHA/NIOSH (aprobado o equivalente) y todo el equipo de protección necesario.

|             |                               |                         |                           |                                                                      |
|-------------|-------------------------------|-------------------------|---------------------------|----------------------------------------------------------------------|
| <b>NFPA</b> | <b>Peligros para la salud</b> | <b>Inflamabilidad</b> 1 | <b>Inestabilidad</b> 0    | <b>Propiedades físicas y químicas -<br/>Protección personal</b><br>X |
|             | 2                             |                         |                           |                                                                      |
| <b>HMIS</b> | <b>Peligros para la salud</b> | <b>Inflamabilidad</b> 1 | <b>Peligros físicos</b> 0 |                                                                      |
|             | 1                             |                         |                           |                                                                      |

**Chronic Hazard Star Legend** \* = Riesgo crónico para la salud

## 6. MEDIDAS EN CASO DE VERTIDO ACCIDENTAL

**Precauciones personales, equipo de protección y procedimientos de emergencia**

**Precauciones individuales:** Utilizar el equipo de protección individual obligatorio. Evacuar al personal a zonas



seguras. Mantener alejadas a las personas y en dirección contraria al viento en una fuga o vertido.

**Precauciones relativas al medio ambiente:** Prevenir más fugas o vertidos si se puede hacer de forma segura. No permitir que se introduzca en ningún tipo de alcantarilla, en el terreno ni en ningún cuerpo de agua. Prevenir la penetración del producto en desagües. Debe avisarse a las autoridades locales si no se pueden contener vertidos importantes. Vea la sección 12 para información ecológica adicional.

#### **Métodos y material de contención y de limpieza**

**Métodos de contención:** Prevenir más fugas o vertidos si se puede hacer de forma segura.

**Métodos de limpieza:** Contener. Absorber con material absorbente inerte. Recoger y transferir a contenedores etiquetados de forma apropiada. Limpiar concienzudamente la superficie contaminada.

### **7. MANIPULACIÓN Y ALMACENAMIENTO**

#### **Precauciones para una manipulación segura**

**Recomendaciones para una manipulación sin peligro:** Utilizar el equipo de protección individual obligatorio. Asegurar una ventilación adecuada, especialmente en áreas confinadas. Utilizar con ventilación por extracción local. No respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol. Para obtener más información, consulte la etiqueta del producto.

#### **Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**

**Condiciones de almacenamiento:** Mantener el contenedor perfectamente cerrado y en un lugar seco y bien ventilado. Mantener los contenedores perfectamente cerrados en un lugar fresco y bien ventilado. Mantener en contenedores etiquetados adecuadamente. Para obtener más información, consulte la etiqueta del producto.

### **8. CONTROLES DE EXPOSICIÓN/ PROTECCIÓN INDIVIDUAL**

#### **Parámetros de control**

**Las Normas de Exposición:** Este producto, tal y como se ha suministrado, no contiene ningún material peligroso con límites de exposición laboral establecidos por las organismos reguladores específicos de la región.

#### **Controles técnicos apropiados**

**Controles técnicos:** Duchas de seguridad  
Estaciones de lavado de ojos  
Sistemas de ventilación

#### **Medidas de protección individual, tales como equipo de protección personal**

**Protección de los ojos/la cara:** Se recomienda el uso de gafas protectoras, aunque no es obligatorio.

**Protección de la piel y el cuerpo:** Se recomienda el uso de guantes protectores, aunque no es obligatorio.

**Protección respiratoria:** Si se superan los límites de exposición o se experimenta irritación, debe llevarse una protección respiratoria aprobada por NIOSH/MSHA. Pueden ser necesarias



máscaras de presión positiva si existen concentraciones elevadas de contaminantes en aire. Debe suministrarse una protección respiratoria de acuerdo con las normativas locales en vigor.

**Consideraciones generales sobre higiene:**

No comer, ni beber, ni fumar durante su utilización. P363 - Lavar las prendas contaminadas antes de volver a usarlas. Se recomienda realizar una limpieza periódica de los equipos así como la zona y la indumentaria de trabajo.

## 9. PROPIEDADES FÍSICAS Y QUÍMICAS

**Información sobre propiedades físicas y químicas básicas:**

|                                         |                               |
|-----------------------------------------|-------------------------------|
| <b>Estado físico:</b>                   | Líquido                       |
| <b>Aspecto:</b>                         | Blanco , crema                |
| <b>Olor</b>                             | dulce                         |
| <b>Umbral olfativo:</b>                 | No hay información disponible |
| <b>Color (en la Escala de Gardner):</b> | No hay información disponible |

| <b><u>Propiedad:</u></b>                              | <b><u>Valores:</u></b>        | <b><u>Comentarios: • Método</u></b> |
|-------------------------------------------------------|-------------------------------|-------------------------------------|
| <b>pH:</b>                                            | 4.90                          | @ 5% en H <sub>2</sub> O. .         |
| <b>Punto de fusión / punto de congelación:</b>        | No hay información disponible |                                     |
| <b>Punto de ebullición / intervalo de ebullición:</b> | No hay información disponible |                                     |
| <b>Punto de inflamación:</b>                          | > 93.3 °C / > 200.0 °F        | Vaso Tag cerrado;                   |
| <b>Tasa de evaporación:</b>                           | No hay información disponible |                                     |
| <b>Inflamabilidad (sólido, gas):</b>                  | No hay información disponible |                                     |
| <b>Límite superior de inflamabilidad:</b>             | No hay información disponible |                                     |
| <b>Límite inferior de inflamabilidad:</b>             | No hay información disponible |                                     |
| <b>Presión de vapor:</b>                              | No hay información disponible |                                     |
| <b>Densidad de vapor:</b>                             | No hay información disponible |                                     |
| <b>Densidad relativa:</b>                             | 1.0281 @ 20.0 °C              |                                     |
| <b>Solubilidad en el agua</b>                         | No hay información disponible |                                     |
| <b>Coefficiente de partición; n-Octanol / Agua:</b>   | No hay información disponible |                                     |
| <b>Temperatura de autoignición:</b>                   | No hay información disponible |                                     |
| <b>Temperatura de descomposición:</b>                 | No hay información disponible |                                     |
| <b>Viscosidad cinemática:</b>                         | No hay información disponible |                                     |
| <b>Viscosidad dinámica</b>                            | 29.5 @ 20°C, 22.0 @ 40°C, cPs |                                     |
| <b>Índice de refracción:</b>                          | No hay información disponible |                                     |

**Other Information:**

|                              |      |
|------------------------------|------|
| <b>Contenido en COV (%):</b> | 0.29 |
|------------------------------|------|

**Miscibilidad/ Solubilidad:**

|                                    |                       |
|------------------------------------|-----------------------|
| <b>Agua:</b>                       | Miscible              |
| <b>Alcohol</b>                     | Miscible              |
| <b>Los disolventes aromáticos:</b> | Parcialmente miscible |
| <b>Destilados de petróleo:</b>     | Inmiscible            |

## 10. ESTABILIDAD Y REACTIVIDAD

**Reactividad**

No hay datos disponibles

**Estabilidad química**

Estable en las condiciones de almacenamiento recomendadas.

**Posibilidad de reacciones peligrosas**

Ninguno durante un proceso normal.

**Polimerización peligrosa:** No se produce ninguna polimerización peligrosa.

**Condiciones que deben evitarse**

Límites de temperatura y exposición a la luz solar directa.

**Materiales incompatibles:**

Incompatible con bases y ácidos fuertes. Incompatible con agentes oxidantes.

**Productos de descomposición peligrosos**

Monóxido de carbono, Dióxido de carbono (CO<sub>2</sub>).

## 11. INFORMACIÓN TOXICOLÓGICA

**Medidas numéricas de toxicidad - Información del producto**

**DL50 oral**

>5,000 mg/kg (rata)

**DL50 cutánea**

>5,000 mg/kg (conejo)

**CL50 por inhalación**

>2.15 mg/L, (rata; 4 horas)

**Contacto con los ojos:**

No irritante para los ojos. (conejo).

**Contacto con la piel:**

No irritante para la piel. (conejo).

**Sensibilización:**

No sensibilizador. (conejillo de Indias).

**Butóxido de piperonilo:**

**Carcinogenicidad/**

**Oncogenicidad:**

Se observaron incidencias marginalmente más altas de tumores hepáticos benignos en ratones después de exposiciones a dosis altas de butóxido de piperonilo (Piperonyl Butoxide, PBO) de por vida. El significado de estas observaciones es dudoso y está siendo revisado. Las dosis de PBO a las que se observaron los tumores excedieron en gran medida la posible exposición en humanos especificada en los usos indicados en la etiqueta. Las dosis a las que se observaron estos efectos exceden en gran medida la ingesta dietaria prevista para humanos. A los niveles previstos de exposición dietaria, es muy poco probable que este producto provoque efectos carcinogénicos.

**Carcinogenicidad**

Este producto no contiene ningún carcinógeno o posible carcinógeno según lo recogido en las listas OSHA, IARC o NTP.

**Toxicidad para la reproducción:**

No hay información disponible.

**Toxicidad para el desarrollo**

No hay información disponible.

**Teratogenicidad:**

No hay información disponible.

**STOT - exposición única:**

No hay información disponible.

**STOT - exposición repetida:**

No hay información disponible.

**Toxicidad crónica:**

Evitar la exposición repetida.

## 12. INFORMACIÓN ECOLÓGICA

**Ecotoxicidad:**



**Persistencia y degradabilidad**

No hay información disponible.

**Bioacumulación**

No hay información disponible.

**Otros efectos adversos:** No hay información disponible**Peligros ambientales (EPA):**

No deseche las aguas residuales que contengan el producto en lagos, arroyos, lagunas, estuarios, océanos u otras masas de agua naturales, a menos que cumpla con los requisitos del permiso otorgado por el Sistema Nacional de Eliminación de Desechos Contaminantes (National Pollutant Discharge Elimination System, NPDES) y las autoridades competentes hayan sido notificadas por escrito antes de desechar las aguas. No deseche las aguas residuales que contengan el producto en sistemas de alcantarillado sin notificar previamente a las autoridades locales de la planta de tratamiento de aguas residuales. Para mayor orientación, comuníquese con su Junta Estatal de Aguas o con la Oficina Regional de la EPA.

**13. CONSIDERACIONES RELATIVAS A LA ELIMINACIÓN****Métodos para el tratamiento de residuos****Eliminación de residuos:**

La eliminación debe realizarse conforme a las leyes y normativas regionales, nacionales y locales aplicables. Para obtener más información, consulte la etiqueta del producto.

**Envase contaminado:**

Para obtener más información, consulte la etiqueta del producto.

**14. INFORMACIÓN RELATIVA AL TRANSPORTE****DOT****Designación oficial de transporte:**

Insecticidas, repelente de insectos o animales, líquido

**Clase de peligro:**

Este material no es peligroso.

**Otra información de transporte:**

Este material no está regulado por el DOT como un material peligroso cuando se transporta en cantidades no a granel (es decir, menos de 119 galones / 450 litros).

Al enviar a granel-cantidades (más de 119 galones / 450 litros), póngase en contacto MGK® para la descripción oficial de transporte.

**IATA/ OACI (aéreo)****Designación oficial de transporte:**

Insecticidas, repelente de insectos o animales, líquido

**Hazard Class:**

Este material no es peligroso.

**IMO/ IMDG**

No está disponible

**15. INFORMACIÓN REGLAMENTARIA****Normativas federales de EE.UU**

**SARA 313**

Sección 313 del Título III de la ley SARA (Superfund Amendments and Reauthorization Act) de 1986. Este producto contiene uno o más agentes químicos sujetos a los requisitos de notificación de la ley y el Título 40 del código de normativas federales (CFR), Parte 372

| Nombre químico                                                                             | SARA 313 - % valores umbral |
|--------------------------------------------------------------------------------------------|-----------------------------|
| Butoxido de Piperonilo { 1,3-Benzodioxol, 5-[[2-(2-butoxi)etoxi]etil]-6-propil-} - 51-03-6 | 1.0                         |

**Categorías de riesgos SARA****311/312**

|                                         |    |
|-----------------------------------------|----|
| Peligro agudo para la salud             | Sí |
| Peligro crónico para la salud           | No |
| Peligro de incendio                     | No |
| Peligro de liberación brusca de presión | No |
| Riesgo de reacción                      | No |

**CWA (Ley del agua limpia, Clean Water Act)**

Este producto no contiene ninguna sustancia regulada como contaminantes según la Ley de Agua Limpia (40 CFR 122.21 y 40 CFR 122.42)

**CERCLA**

Este material, tal y como se suministró, no contiene ninguna sustancia considerada como sustancia peligrosa según la Ley de Responsabilidad, Compensación y Recuperación Ambiental (CERCLA) (40 CFR 302) o la Ley de enmiendas y reautorización del superfondo (SARA) (40 CFR 355). Pueden existir requisitos de creación de informes específicos a nivel local, regional o estatal relativos a emisiones de este material

**Normativas estatales de EE.UU:****Proposición 65 de California:**

Este producto no contiene ninguna sustancia química de la Proposición 65

**U.S. EPA Label Information:**

Número de registro de la EPA: 1021-2776

**Diferencia entre SDS y EPA (FIFRA) etiqueta del pesticida:**

Este producto químico es un producto pesticida registrado por la Agencia de Protección Ambiental de Estados Unidos y está sujeta a determinados requisitos de etiquetado bajo la ley federal de pesticidas. Estos requisitos difieren de los criterios de clasificación y los peligros información necesaria para Ficha de Datos de Seguridad (SDS), y para las etiquetas de los productos químicos del lugar de trabajo no-pesticida. La etiqueta del pesticida también incluye otra información importante, incluyendo las instrucciones de uso. La información sobre el peligro requerido en la etiqueta del pesticida se reproduce a continuación:

**Internacionales:**

|               |                |
|---------------|----------------|
| TSCA          | Cumple         |
| DSL/NDL       | Cumple         |
| EINECS/ELINCS | No es conforme |
| ENCS          | No es conforme |
| IECSC         | No es conforme |
| KECL          | No es conforme |
| PICCS         | No es conforme |
| AICS          | No es conforme |

**Leyenda:**



**TSCA** - Ley de control de sustancias tóxicas (Toxic Substances Control Act) estadounidense, apartado 8(b), Inventario

**DSL/NDSL** - Lista de sustancias domésticas/no domésticas de Canadá

**EINECS/ELINCS** - (Inventario europeo de sustancias químicas existentes/Lista europea de sustancias químicas notificadas, European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances)

**ENCS** - Sustancias químicas existentes y nuevas de Japón

**IECSC** - Inventario de sustancias químicas existentes de China

**KECL** - Sustancias químicas existentes y evaluadas de Corea

**PICCS** - Inventario de productos químicos y sustancias químicas de Filipinas

**AICS** - Inventario australiano de sustancias químicas, Australian Inventory of Chemical Substances

## 16. OTRA INFORMACIÓN, INCLUIDA LA FECHA DE PREPARACIÓN DE LA ÚLTIMA REVISIÓN

**Fecha de publicación:**  
02-mar-2018

**Fecha de revisión:**  
02-mar-2018

**Nota de revisión:**  
- Secciones de la FDS actualizadas  
- 2  
- 8  
- 9  
- 15  
- 16

**SDS Preparado por:**  
Dirección de correo electrónico

Troy Azzivitto, Departamento de Química MGK®.  
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### Descargo de responsabilidad:

La información proporcionada en esta Hoja de Seguridad (SDS) se proporciona de buena fe y se cree que es válida en el momento de la preparación de la SDS. Sin embargo, en la medida compatible con la legislación aplicable, MGK® y sus subsidiarias o afiliadas no extienden ninguna garantía, tampoco se manifestarán, ni asumen ninguna responsabilidad en cuanto a la exactitud, adecuación o integridad de dicha información. Además, en la medida compatible con la legislación aplicable, ni MGK® ni ninguna de sus subsidiarias o afiliadas representa o garantiza que esta información o producto puede ser usado sin infringir los derechos de propiedad intelectual de otros. Salvo en la medida de un uso en particular y de información en particular que se mencione expresamente en la etiqueta del producto, es responsabilidad de los usuarios determinar la idoneidad de esta información para su propio uso particular de este producto. Si es necesario, contacte a MGK® para confirmar que tiene la etiqueta del producto más actual y SDS.

Esta Hoja de Datos de Seguridad (SDS) que puede usarse para diferentes propósitos y NO REEMPLAZA O MODIFICA LA ETIQUETA DEL PRODUCTO aprobado por la EPA (pegada y que acompaña el envase del producto). Esta Ficha de Seguridad se proporciona información importante sobre salud, seguridad y medio ambiente para los empleadores, empleados, servicios de emergencia y los que manipulan grandes cantidades del producto en actividades generalmente del uso del producto según lo dispuesto por la Ley de Seguridad y Salud Ocupacional (29 CFR 1910.1200, "Hazcom"). La etiqueta del producto proporciona información específicamente para el uso del producto en el curso ordinario. Uso, almacenamiento y eliminación de plaguicidas están regulados por la EPA bajo la autoridad de la FIFRA a través de la etiqueta del producto. Toda la clasificación necesaria de peligro y el uso apropiado de precaución, el almacenamiento y la eliminación de la información se expone en esa etiqueta o etiquetado que acompaña el plaguicida o al que se hace referencia en la etiqueta. Es una violación de la ley federal usar un producto pesticida registrado por la

EPA, en cualquier forma incompatible con su etiqueta.

**Fin de la ficha de datos de seguridad.**