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

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
8810 10th Avenue North
Minneapolis, MN 55427
Telephone Number: (800) 645-6466, or (763) 544-0341
FAX #: (763) 544-6437
e-Mail Address: mgk-sds@mgk.com

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

WARNING

Hazard statements
• H332 - Harmful if inhaled
• H400 - Very toxic to aquatic life
• H410 - Very toxic to aquatic life with long lasting effects
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:
P405 - Store locked up
P403 + P235 - Store in a well-ventilated place. Keep cool

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metofluthrin</td>
<td>240494-70-6</td>
<td>0.100</td>
</tr>
<tr>
<td>Clothianidin</td>
<td>210880-92-5</td>
<td>4.00</td>
</tr>
<tr>
<td>Piperonyl Butoxide (PBO)</td>
<td>51-03-6</td>
<td>10.0</td>
</tr>
</tbody>
</table>

*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 (CO2).

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
HMIS Health hazards 1 Flammability 1 Physical hazards 0

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: Wear protective gloves and protective clothing.

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
Density: 1.0281 g/cm³ @ 22.5 °C
VOC Content (%): 0.29

Miscibility/ Solubility:
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 (CO2).
11. TOXICOLOGICAL INFORMATION

Numerical measures of toxicity - Product Information

Oral LD$_{50}$  >5,000 mg/kg (rat)
Dermal LD$_{50}$  >5,000 mg/kg (rabbit)
Inhalation LC$_{50}$  >2.15 mg/L, (rat; 4 hours)
Eye contact: Non-irritating to eyes. (rabbit).
Skin Contact: Non-irritating to the skin. (rabbit).
Sensitization: Non-sensitizer. (guinea pig).

Piperonyl Butoxide:
Carcinogenicity/ Oncogenicity: 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.

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity: No information available.
Developmental Toxicity: No information available.
Teratogenicity: No information available.
STOT - single exposure: No information available.
STOT - repeated exposure: 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.
14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
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<tbody>
<tr>
<td>Piperonyl Butoxide (PBO) - 51-03-6</td>
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SARA 311/312 Hazard

Categories

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<th>Hazard Category</th>
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<tbody>
<tr>
<td>Acute health hazard</td>
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<tr>
<td>Chronic Health Hazard</td>
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<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
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<tr>
<td>Reactive Hazard</td>
<td>No</td>
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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:
TSCA  Does not comply
DSL/NDSL  Does not comply
EINECS/ELINCS  Does not comply
ENCS  Does not comply
IECSC  Does not comply
KECL  Does not comply
PICCS  Does not comply
AICS  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.

<table>
<thead>
<tr>
<th>Issue Date:</th>
<th>Revision Date:</th>
<th>Revision Note:</th>
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<tr>
<td>01-Aug-2016</td>
<td>01-Aug-2016</td>
<td>- SDS sections updated</td>
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SDS Prepared By: Troy Azzivitto, MGK® Chemistry Department.
e-Mail Address: mgk-sds@mgk.com

Disclaimer: The data contained herein are based on information currently available to McLaughlin Gormley King Company and, to the best of our knowledge, are accurate and based on sound expert opinion. Our statements herein, however, are not to betaken as a warranty or representation for which McLaughlin Gormley King Company assumes legal responsibility.

End of Safety Data Sheet.