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Version: 2

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

**Product Name:** Crossfire® Aerosol

**EPA Registration Number:** 1021-2788

**Other means of identification**

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

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

**Recommended Use:** A Liquefied Aerosol Insecticide Spray.

**Details of the supplier of the safety data sheet**

**Manufacturer Address:**

McLaughlin Gormley King Company  
8810 10th Avenue North  
Minneapolis, MN 55427

**FAX #:**

(763) 544-6437

Telephone Number:

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

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

**Environment:** OSHA has not adopted the environmental - portion of the GHS regulations, however, this SDS may include information on environmental effects.

**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
Flammable aerosol	Category 2
Gases under pressure	Liquefied gas

**Label elements**

**Emergency Overview**

**WARNING**

**Hazard statements**

- H332 - Harmful if inhaled
- H401 - Toxic to aquatic life
- H411 - Toxic to aquatic life with long lasting effects
- H223 - Flammable aerosol
- H280 - Contains gas under pressure; may explode if heated



**Appearance:** White - cream (Aerosol Non-volatiles)

**Physical state:** Aerosol - Compressed liquefied gas.

**Odor** Sweet Odor (Aerosol Non-volatiles)

**Precautionary Statements - Prevention:**

- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P211 - Do not spray on an open flame or other ignition source  
 P251 - Pressurized container: Do not pierce or burn, even after use  
 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:**

- P410 + P403 - Protect from sunlight. Store in a well-ventilated place  
 P411 - Do not expose to temperatures exceeding 50 °C/122 °F

**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-%
Clothianidin	210880-92-5	0.40
Metofluthrin	240494-70-6	0.010
Piperonyl Butoxide (PBO)	51-03-6	1.00
Propane	74-98-6	1.52
Isobutane	75-28-5	8.48

\*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:** Remove all sources of ignition. 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:**

In the event of fire and/or explosion do not breathe fumes.

<b><u>NFPA</u></b>	<b>Health hazards</b> 2	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Physical and Chemical Properties</b>
<b><u>HMIS</u></b>	<b>Health hazards</b> 2	<b>Flammability</b> 4	<b>Physical hazards</b> 0	<b>Personal protection</b>
				X

**Chronic Hazard Star Legend** \* = Chronic Health Hazard

**6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions:** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up:** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling:** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. For more information, see product label.

**Conditions for safe storage, including any incompatibilities**

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

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION****Control parameters****Exposure Guidelines:**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Supplier OEL
Propane 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	-
Isobutane 75-28-5	STEL: 1000 ppm explosion hazard	-	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>	-

**NIOSH IDLH** *Immediately Dangerous to Life or Health*

**Other Information:** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**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. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties:**

**Physical state:** Aerosol - Compressed liquefied gas.  
**Appearance:** White - cream (Aerosol Non-volatiles)  
**Odor:** Sweet Odor (Aerosol Non-volatiles)  
**Odor threshold:** No information available  
**Color (Gardner Scale):** No information available

<u>Property:</u>	<u>Values:</u>	<u>Comment: • Method</u>
<b>pH:</b>	6.10	Test was performed on aerosol Non-Volatile's.
<b>Melting point / freezing point:</b>	No information available	
<b>Boiling point / boiling range:</b>	No information available	
<b>Flash point:</b>	> 93.3 °C / > 200.0 °F	Tag Closed Cup; Test was performed on aerosol Non-Volatile's

<b>Evaporation rate:</b>	No information available	
<b>Flammability (solid, gas):</b>	No information available	
<b>Upper flammability limit (UEL):</b>	No information available	
<b>Lower flammability limit (LEL):</b>	No information available	
<b>Vapor pressure:</b>	No information available	
<b>Vapor density:</b>	No information available	
<b>Specific Gravity:</b>	No information available	
<b>Water solubility:</b>	No information available	
<b>Partition coefficient; n-Octanol/ Water:</b>	No information available	
<b>Autoignition temperature:</b>	No information available	
<b>Decomposition temperature:</b>	No information available	
<b>Kinematic viscosity:</b>	No information available	
<b>Dynamic viscosity:</b>	1.00 @ 20°C, 2.00 @ 40°C, cPs	Test was performed on aerosol Non-Volatile's.
<b>Refractive Index:</b>	No information available	

**Other Information:**

**Density:** 1.0019 g/cm<sup>3</sup> @ 21.0 °C (Aerosol Non-volatiles)

VOC Content (%): 10.0

**Miscibility/ Solubility:**

**Water:** Partially miscible  
**Alcohol** Partially miscible  
**Aromatic solvents:** Partially miscible  
**Petroleum distillates:** Partially miscible

## 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**

Heat, flames and sparks.

**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**

**Oral LD<sub>50</sub>** >5,000 mg/kg (rat)  
**Dermal LD<sub>50</sub>** >5,000 mg/kg (rabbit)  
**Inhalation LC<sub>50</sub>** >2.15 mg/L, (rat; 4 hours)  
**Eye contact:** Non-irritating to eyes. Irritation clearing in 24 hours. (rabbit).  
**Skin Contact:** Non-irritating to the skin. No irritation observed. (rabbit).  
**Sensitization:** Negative. (guinea pig).

**Comment:** Toxicology data was bridged from a similar formula.

**Piperonyl Butoxide:** 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.

**IARC (International Agency for Research on Cancer):**

*Not classifiable as a human carcinogen.*

**Reproductive toxicity:** No information available.  
**Developmental Toxicity** No information available.  
**Teratogenicity:** No information available.  
**STOT - single exposure:** No information available.  
**STOT - repeated exposure:** No information available.  
**Chronic toxicity:** Avoid repeated exposure.  
**Target Organ Effects:** Central nervous system.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

#### Persistence and degradability

No information available.

#### Bioaccumulation

No information available.

Chemical Name	Partition coefficient; n-Octanol/ Water:
Propane 74-98-6	2.3
Isobutane 75-28-5	2.88

**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)

**UN/ID Number:** UN1950  
**Proper Shipping Name:** Aerosols, flammable  
**Hazard Class:** 2.1

### Air (IATA/ ICAO)

**UN/ID Number:** UN1950  
**Proper Shipping Name:** Aerosols, flammable  
**Hazard Class:** 2.1

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

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

#### **SARA 311/312 Hazard**

##### Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	Yes
Reactive Hazard	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:** 1021-2788

#### **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	Complies
DSL/NDSL	Complies
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.**

Issue Date:	Revision Date:	Revision Note:
23-Jan-2018	23-Jan-2018	- SDS sections updated
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		- 3
		- 5
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**SDS Prepared By:**

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**Disclaimer:**

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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.**