SAFETY DATA SHEET



1. Identification		
Product number	1000010168	
Product identifier	BUG BUSTER INSECT KILLER	
Company information	Claire Manufacturing Co. 1005 S. Westgate Drive Addison, IL 60101 United States	
Company phone	General Assistance 1-630-543-7600	
Emergency telephone US	1-866-836-8855	
Emergency telephone outside US	1-952-852-4646	
Version #	01	
Recommended use	PESTICIDE	
Recommended restrictions	None known.	
2. Hazard(s) identification		
Physical hazards	Flammable aerosols	Category 1
Health hazards	Not classified.	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Danger	

Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid release to the environment.
Response	Collect spillage.
Storage	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures			
Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.5 - 10
Propane		74-98-6	2.5 - 10
Piperonyl Butoxide		51-03-6	1 - 2.5
Pyrethrins		8003-34-7	0.1 - 1
Other components below reportable	levels		60 - 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Remove all possible sources of ignition in the surrounding area. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code". Level 1 Aerosol. Conditions for safe storage, including any incompatibilities Pressurized container. Protect from sunlight and do not expose to temperatures exceeding

50 °C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational	exposure	limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value
Propane (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm
Pyrethrins (CAS 8003-34-7)	PEL	5 mg/m3
US. ACGIH Threshold Limit	Values	
Components	Туре	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Pyrethrins (CAS 8003-34-7)	TWA	5 mg/m3
US. NIOSH: Pocket Guide to	Chemical Hazards	
Components	Туре	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3
		800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
Pyrethrins (CAS 8003-34-7)	TWA	5 mg/m3
ological limit values	No biological exposure limits noted for	or the ingredient(s).
opropriate engineering ontrols	should be matched to conditions. If a or other engineering controls to main	air changes per hour) should be used. Ventilation rates pplicable, use process enclosures, local exhaust ventilation, tain airborne levels below recommended exposure limits. If ished, maintain airborne levels to an acceptable level.
dividual protection measures, Eye/face protection	such as personal protective equipm Wear safety glasses with side shields	
Hand protection	Wear appropriate chemical resistant	gloves.
Skin protection		-
Other	Wear suitable protective clothing.	
Respiratory protection	If permissible levels are exceeded us air-supplied respirator.	e NIOSH mechanical filter / organic vapor cartridge or an

Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Gas. Form
	Aerosol. Color
	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C) estimated
Flash point	-156.0 °F (-104.4 °C) PROPELLANT estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	1.5 % estimated
Flammability limit - upper (%)	9.5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	30.85 psig @70F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	421 °F (216.11 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	0.888 estimated
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.
11 Tovicological informat	ion

11. Toxicological information

Information on likely routes of exposure

IngestionExpected to be a low ingestion hazard.InhalationNo adverse effects due to inhalation are expected.

	No adverse effects due to skin contact are expected.
	Direct contact with eyes may cause temporary irritation.
е	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Skin contact Eye contact

Information on toxicological effects

Acute toxicity

neute toxicity		
Components	Species	Test Results
Butane (CAS 106-97-8)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
Piperonyl Butoxide (CAS 51-03-6)		
Acute		
Dermal		
LD50	-	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5.2 mg/l, 4 Hours
Oral		
LD50	Rat	5630 mg/kg
Propane (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
		658 mg/l/4h
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritat	tion.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irrita	ation.
Respiratory or skin sensitization	1	
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization	ation.
Germ cell mutagenicity	No data available to indicate product or any compo mutagenic or genotoxic.	nents present at greater than 0.1% are
Carcinogenicity	Risk of cancer cannot be excluded with prolonged	exposure.
IARC Monographs. Overall	Evaluation of Carcinogenicity	
	51-03-6) 3 Not classifiable as 3 Substances (29 CFR 1910.1001-1050)	s to carcinogenicity to humans.
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive	or developmental effects.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity -	Not classified.	
repeated exposure		
repeated exposure Aspiration hazard	Not available.	

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Piperonyl Butoxide (C	AS 51-03-6)		
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.0027 - 0.0043 mg/l, 96 hours
Pyrethrins (CAS 8003	-34-7)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia)	0.018 - 0.032 mg/l, 48 hours
Fish	LC50	Brown trout (Salmo trutta)	0.0165 - 0.0229 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

i oroiotorioo ana aogradability	The data is available of the degradability of the product.	
Bioaccumulative potential	No data available.	
Partition coefficient n-octand	bl / water (log Kow)	
Butane	2.89	
Piperonyl Butoxide	4.75	
Propane	2.36	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, pho	

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

I	ТОСТ	
	UN number	UN1950
	UN proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity)
	Transport hazard class(es)	
	Class	2.1
	Subsidiary risk	
	Label(s)	2.1
	Packing group	Not applicable.
	Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
	Special provisions	N82
	Packaging exceptions	306
	Packaging non bulk	None
	Packaging bulk	None
	This product meets the except	ion requirements of section 173.306 as a limited quantity and may be shipped as a limited quanti

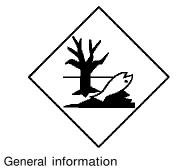
This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s) Packing	2.1
group Environmental	Not applicable.
hazards ERG Code	Yes
	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
Packaging Exceptions	LTD QTY
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s) Packing	2.1
group Environmental	Not applicable.
hazards	
Marine pollutant	Yes
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

DOT



Marine pollutant



IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations	This product is a "Hazardo Standard, 29 CFR 1910.12 One or more components	200.	ed by the OSHA Hazard Communication
TSCA Section 12(b) Expo	rt Notification (40 CFR 707, S	ubpt. D)	
Not regulated.			
	stance List (40 CFR 302.4)	Listad	
Pyrethrins (CAS 8003 SARA 304 Emergency rel		Listed.	
Not regulated. OSHA Specifically Regula	ited Substances (29 CFR 191	0.1001-1050)	
Not listed.			
Superfund Amendments and	-	SARA)	
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No		
SARA 302 Extremely haz	ardous substance		
Not listed.			
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.
Piperonyl Butoxide		51-03-6	1 - 2.5
Other federal regulations			
-	on 112 Hazardous Air Polluta	ants (HAPs) List	
Not regulated.			
Clean Air Act (CAA) Sect	on 112(r) Accidental Release	Prevention (40 CFR	68.130)
Butane (CAS 106-97-8 Propane (CAS 74-98-			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations			
US. Massachusetts RTK	Substance List		
Butane (CAS 106-97-8 Propane (CAS 74-98- Pyrethrins (CAS 8003	5)		
US. New Jersey Worker and Community Right-to-Know Act Butane (CAS 106-97-8)			
Butane (CAS 106-97-8	nd Community Right-to-Knov	v Act	
Butane (CAS 106-97-8 Piperonyl Butoxide (C	nd Community Right-to-Knov 3)	v Act	
Piperonyl Butoxide (C. Propane (CAS 74-98-	nd Community Right-to-Knov 3) AS 51-03-6) 3)	v Act	
Piperonyl Butoxide (C. Propane (CAS 74-98- Pyrethrins (CAS 8003	nd Community Right-to-Knov 3) AS 51-03-6) 3) 34-7)		
Piperonyl Butoxide (C. Propane (CAS 74-98- Pyrethrins (CAS 8003 US. Pennsylvania Worker	nd Community Right-to-Knov 3) AS 51-03-6) 3) 34-7) and Community Right-to-Kno		
Piperonyl Butoxide (C. Propane (CAS 74-98- Pyrethrins (CAS 8003	nd Community Right-to-Knov 3) AS 51-03-6) 34-7) and Community Right-to-Kno 3) 3)		

Pyrethrins (CAS 8003-34-7) US. Rhode Island RTK Butane (CAS 106-97-8) Piperonyl Butoxide (CAS 51-03-6) Propane (CAS 74-98-6) Pyrethrins (CAS 8003-34-7) US. California Proposition 65 WARNING: This product contains a chemical known to the State of California to cause cancer. US - California Proposition 65 - CRT: Listed date/Carcinogenic substance Diethanolamine (CAS 111-42-2) Listed: June 22, 2012 International Inventories Country(s) or region Inventory name On inventory (yes/no)* Australian Inventory of Chemical Substances (AICS) Australia No Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) No Europe European Inventory of Existing Commercial Chemical No Substances (EINECS) Europe European List of Notified Chemical Substances (ELINCS) No Inventory of Existing and New Chemical Substances (ENCS) Japan No Korea Existing Chemicals List (ECL) No New Zealand New Zealand Inventory No Philippines Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS) United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	01-28-2015
Version #	01
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.