



SAFETY DATA SHEET

1. Identification

Product identifier: CLAIRE MULTI-KILL FLYING INSECT KILLER - EPA# 1021-1710-706

Other means of identification

SDS number: RE1000001731

Recommended restrictions

Product use: Pesticide

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: CLAIRE MANUFACTURING COMPANY
Address: 1000 Integram Dr
Pacific, MO 63069
Telephone: 1-630-543-7600
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Harmful to aquatic life.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid release to the environment.



Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Butane	106-97-8	10 - <20%
Distillates (petroleum), hydrotreated light	64742-47-8	5 - <10%
Propane	74-98-6	5 - <10%
n-Octyl Bicycloheptane Dicarboximide	113-48-4	1 - <5%
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	51-03-6	0.1 - <1%
2-Methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	23031-36-9	0.1 - <1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.



Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

Notification Procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Conditions for safe storage, including any incompatibilities: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Butane	REL	800 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Distillates (petroleum), hydrotreated light	REL	100 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2008)
	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2008)
Propane	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)



Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection: Wear goggles/face shield.

Skin Protection
Hand Protection: No data available.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: When using do not smoke. Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: Spray Aerosol
Color: No data available.
Odor: No data available.
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: Estimated 100 °C
Flash Point: Estimated -104.4 °C
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): Estimated 9.5 %(V)
Flammability limit - lower (%): Estimated 1.9 %(V)
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.

Vapor pressure: 3,102 - 4,481 hPa (20 °C)

Vapor density: No data available.

Density: Estimated 0.808 g/cm³

Relative density: No data available.

Solubility(ies)

Solubility in water: No data available.

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: Estimated 236 °C

Decomposition temperature: No data available.

Viscosity: No data available.



10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Distillates (petroleum), hydrotreated light	LD 50 (Rat): > 5,000 mg/kg
n-Octyl Bicycloheptane Dicarboximide	LD 50 (Rat): 2,800 mg/kg
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	LD 50 (Rat): 5,630 mg/kg
2-Methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	LD 50 (Rat): 460 mg/kg



Dermal
Product: ATEmix: 29,123.96 mg/kg

Inhalation
Product: ATEmix: 4,690.43 mg/l
ATEmix : 469.04 mg/l

Repeated dose toxicity
Product: No data available.

Specified substance(s):
Butane
Distillates (petroleum), hydrotreated light
Propane
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-

LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation): >= 24 mg/m3 Inhalation Experimental result, Key study
NOAEL (Rat(Female), Oral, 70 - 147 d): 750 mg/kg Oral Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
NOAEL (Dog(Female, Male), Oral, 1 yr): 600 ppm(m) Oral Experimental result, Key study
LOAEL (Rat(Female, Male), Oral, 28 - 31 d): 250 mg/kg Oral Experimental result, Supporting study
NOAEL (Rat(Female, Male), Oral, 28 - 31 d): 125 mg/kg Oral Experimental result, Supporting study
NOAEL (Rabbit(Female, Male), Dermal): > 1,000 mg/kg Dermal Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation): >= 512 mg/m3 Inhalation Experimental result, Key study

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
Distillates (petroleum), hydrotreated light
in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):
Distillates (petroleum), hydrotreated light
Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization
Product: No data available.

Specified substance(s):
Distillates (petroleum), hydrotreated light
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-
Skin sensitization:, in vivo (Guinea pig): Non sensitising
Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified



US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s):

Distillates (petroleum),
hydrotreated light
May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

n-Octyl Bicycloheptane
Dicarboximide LC 50 (Rainbow Trout, 96 h): 1.4 mg/l

1,3-Benzodioxole, 5-[[2-
(2-
butoxyethoxy)ethoxy]met
hyl]-6-propyl- LC 50 (Oncorhynchus mykiss, 96 h): 6.12 mg/l Experimental result, Key
study
NOAEL (96 h): 0.625 mg/l Experimental result, Key study

2-Methyl-4-oxo-3-(prop-2-
ynyl)cyclopent-2-en-1-yl
2,2-dimethyl-3-(2-
methylprop-1-
enyl)cyclopropanecarbox
ylate (Fish, 96 h): < 1 mg/l Expected to be very toxic to aquatic organisms. May
cause long-term adverse effects in the environment.



Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
n-Octyl Bicycloheptane Dicarboximide	EC 50 (Daphnia magna, 48 h): 2.3 mg/l
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	EC 50 (Daphnia magna, 48 h): 510 µg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s):	
Distillates (petroleum), hydrotreated light	NOAEL (Oncorhynchus mykiss): 0.098 mg/l QSAR QSAR, Key study
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	NOAEL (Pimephales promelas): 0.18 mg/l Experimental result, Key study LOAEL (Pimephales promelas): 0.42 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	LOAEL (Daphnia magna): 47 µg/l Experimental result, Key study NOAEL (Daphnia magna): 30 µg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product:	No data available.
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Persistence and Degradability

Biodegradation

Product:	No data available.
Specified substance(s):	
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study
Distillates (petroleum), hydrotreated light	61 % Detected in water. Experimental result, Supporting study
Propane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	24 - 48 % (28 d) Detected in water. Experimental result, Supporting study

BOD/COD Ratio

Product:	No data available.
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Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl- Bioconcentration Factor (BCF): 39.06 Aquatic sediment QSAR, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl- Log Kow: 4.8 - 5.20 - 25 °C

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Butane	No data available.
Distillates (petroleum), hydrotreated light	No data available.
Propane	No data available.
n-Octyl Bicycloheptane Dicarboximide	No data available.
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	No data available.
2-Methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	No data available.

Other adverse effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
Packing Group:	II
Marine Pollutant:	No
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

IMDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2
Label(s):	–



EmS No.:
Packing Group: –
Environmental Hazards: No
Marine Pollutant: No
Special precautions for user: Not regulated.

IATA

UN Number: UN 1950
Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es):
Class: 2.1
Label(s): –
Packing Group: –
Environmental Hazards: No
Marine Pollutant: No
Special precautions for user: Not regulated.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
Propane	lbs. 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Fire Hazard
Flammable aerosol

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Distillates (petroleum), hydrotreated light		

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
Distillates (petroleum), hydrotreated light	
Propane	lbs. 100



SARA 311/312 Hazardous Chemical

Chemical Identity

	<u>Threshold Planning Quantity</u>
Butane	10000 lbs
Distillates (petroleum), hydrotreated light	10000 lbs
Propane	10000 lbs
n-Octyl Bicycloheptane Dicarboximide	10000 lbs
1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-	10000 lbs
2-Methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Butane
Distillates (petroleum), hydrotreated light
Propane

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Butane
Distillates (petroleum), hydrotreated light
Propane

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Distillates (petroleum), hydrotreated light

Stockholm convention

Distillates (petroleum), hydrotreated light

Rotterdam convention

Distillates (petroleum), hydrotreated light

Kyoto protocol



Inventory Status:

Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	On or in compliance with the inventory
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

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

Issue Date: 11/14/2019

Revision Information: No data available.

Version #: 1.0

Further Information: FIFRA: 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.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

