



# 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)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	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/cm<sup>3</sup>

**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

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

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

<b>Product:</b>	Not classified for acute toxicity based on available data.
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##### 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	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
Distillates (petroleum), hydrotreated light	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
Propane	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
1,3-Benzodioxole, 5-[[2- (2- butoxyethoxy)ethoxy]met hyl]-6-propyl-	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	Skin sensitization:, in vivo (Guinea pig): Non sensitising
1,3-Benzodioxole, 5-[[2- (2- butoxyethoxy)ethoxy]m ethyl]-6-propyl-	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

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
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

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
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

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
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

<b>Product:</b>	No data available.
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#### Persistence and Degradability

##### Biodegradation

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
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

<b>Product:</b>	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**

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

##### **Threshold Planning Quantity**

10000 lbs  
10000 lbs  
10000 lbs  
10000 lbs  
10000 lbs  
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.

