# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** CLAIRE DISINFECTANT SPRAY Q (LEMON)- EPA# 706-111

**Other means of identification**
**SDS number:** RE1000039391

**Recommended restrictions**
**Product use:** Disinfectant
**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

| | |
|---|---|
| Company Name: | CLAIRE MANUFACTURING COMPANY |
| Address: | 1000 Integram Dr<br>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 |

**Health Hazards**

| | |
|---|---|
| Serious Eye Damage/Eye Irritation | Category 2A |
| Skin sensitizer | Category 1 |
| Specific Target Organ Toxicity - Repeated Exposure | Category 2 |

**Label Elements**

**Hazard Symbol:**

**Signal Word:** Danger

**Hazard Statement:**
Extremely flammable aerosol.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.

**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. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapors/spray.

**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water If skin irritation or rash occurs: Get medical advice/attention. Get medical advice/attention if you feel unwell. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**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 (%)* |
|---|---|---|
| Ethanol | 64-17-5 | 10 - <20% |
| Ethanol, 2-(2-butoxyethoxy)- | 112-34-5 | 10 - <20% |
| Propane | 74-98-6 | 1 - <5% |
| Butane | 106-97-8 | 1 - <5% |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | 64-02-8 | 1 - <3% |
| 2-Propanol, 2-methyl- | 75-65-0 | 0.1 - <1% |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | 85409-23-0 | 0.1 - <0.25% |
| 2,6-Octadienal, 3,7-dimethyl- | 5392-40-5 | 0.1 - <1% |
| Sodium hydroxide (Na(OH)) | 1310-73-2 | 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:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Inhalation:** Move to fresh air.

**Skin Contact:** If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**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. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. |
| **Methods and material for containment and cleaning up:** | Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. |
| **Notification Procedures:** | Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. |
| **Environmental Precautions:** | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. |

## 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling:** | Avoid contact with eyes. Wash hands thoroughly after 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. Avoid contact with eyes, skin, and clothing. |
| **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 |
|---|---|---|---|---|
| Ethanol | REL | 1,000 ppm | 1,900 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | PEL | 1,000 ppm | 1,900 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| | TWA | 1,000 ppm | 1,900 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | STEL | 1,000 ppm | | US. ACGIH Threshold Limit Values (2009) |
| Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor. | TWA | 10 ppm | | US. ACGIH Threshold Limit Values (03 2013) |
| 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) |
| 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) |
| 2-Propanol, 2-methyl- | STEL | 150 ppm | 450 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | TWA | 100 ppm | 300 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | PEL | 100 ppm | 300 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| | TWA | 100 ppm | | US. ACGIH Threshold Limit Values (2008) |
| | STEL | 150 ppm | 450 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | REL | 100 ppm | 300 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| 2,6-Octadienal, 3,7-dimethyl- - Inhalable fraction and vapor. | TWA | 5 ppm | | US. ACGIH Threshold Limit Values (01 2010) |
| Sodium hydroxide (Na(OH)) | Ceiling | | 2 mg/m3 | US. ACGIH Threshold Limit Values (2008) |
| | Ceiling | | 2 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | Ceil_Time | | 2 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | PEL | | 2 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Ethanol, 2-butoxy- | TWA | 20 ppm | | US. ACGIH Threshold Limit Values (2008) |
| | TWA | 25 ppm | 120 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | REL | 5 ppm | 24 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | PEL | 50 ppm | 240 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Ammonium hydroxide ((NH4)(OH)) | STEL | 35 ppm | | US. ACGIH Threshold Limit Values (2008) |
| | TWA | 25 ppm | | US. ACGIH Threshold Limit Values (2008) |
| | STEL | 35 ppm | 27 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | STEL | 35 ppm | 27 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | REL | 25 ppm | 18 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2005) |
| | PEL | 50 ppm | 35 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

#### Biological Limit Values

| Chemical Identity | Exposure Limit Values | Source |
|---|---|---|
| Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.) | 200 mg/g (Creatinine in urine) | ACGIH BEL (03 2013) |

**Appropriate Engineering Controls** No data available.

**Individual protection measures, such as personal protective equipment**

| | |
|---|---|
| **General information:** | Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| **Eye/face protection:** | Wear safety glasses with side shields (or goggles). |
| **Skin Protection** | |
| **Hand Protection:** | No data available. |
| **Other:** | Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information. |
| **Respiratory Protection:** | In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. |
| **Hygiene measures:** | Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin. |

## 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:** | No data available. |
| **Flash Point:** | -104.44 °C |
| **Evaporation rate:** | No data available. |
| **Flammability (solid, gas):** | No data available. |
| **Upper/lower limit on flammability or explosive limits** | |
| **Flammability limit - upper (%):** | No data available. |
| **Flammability limit - lower (%):** | No data available. |
| **Explosive limit - upper (%):** | No data available. |
| **Explosive limit - lower (%):** | No data available. |
| **Vapor pressure:** | 5,171.0680 - 6,550.0194 hPa (20 °C) |
| **Vapor density:** | No data available. |
| **Density:** | No data available. |
| **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:** | No data available. |

| | |
|---|---|
| **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:** | ATEmix: 16,286.29 mg/kg |

**Dermal**

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

**Specified substance(s):**

| | |
|---|---|
| Ethanol | LD 50 (Rabbit): 17,100 mg/kg |
| Ethanol, 2-(2-butoxyethoxy)- | LD 50 (Rabbit): 2,764 mg/kg |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | LD 50: > 2,000 mg/kg |

| | |
|---|---|
| 2-Propanol, 2-methyl- | LD 50: > 2,000 mg/kg |
| 2,6-Octadienal, 3,7-dimethyl- | LD 50 (Rat): > 2,000 mg/kg |

**Inhalation**

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

**Specified substance(s):**

| | |
|---|---|
| Ethanol | LC 50 (Rat): 124.7 mg/l<br>LC 50: > 5 mg/l |
| Ethanol, 2-(2-butoxyethoxy)- | LC 50 (Various): > 20 mg/l |
| Propane | LC 50: > 100 mg/l<br>LC 50: > 100 mg/l |
| Butane | LC 50: > 100 mg/l<br>LC 50: > 100 mg/l |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | LOAEL (Rat): 30 mg/m3 |
| 2-Propanol, 2-methyl- | LC 50: < 20 mg/l |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl] dimethyl, chlorides | LC 50: > 5 mg/l<br>LC 50: > 20 mg/l |
| 2,6-Octadienal, 3,7-dimethyl- | LC 50: > 20 mg/l<br>LC 50: > 5 mg/l |

**Repeated dose toxicity**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result, Key study |
| Ethanol, 2-(2-butoxyethoxy)- | NOAEL (Rat(Female, Male), Oral, 90 d): 250 mg/kg Oral Experimental result, Key study<br>NOAEL (Rat(Female, Male), Dermal, 13 Weeks): > 2,000 mg/kg Dermal Experimental result, Key study<br>NOAEL (Rat(Female, Male), Inhalation, 90 - 120 d): 14 ppm(m) Inhalation Experimental result, Key study |
| Propane | NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study<br>LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study |
| Butane | LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study<br>NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | NOAEL (Rat(Female, Male), Oral, 103 Weeks): >= 500 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Key study<br>LOAEL (Rat(Male), Inhalation, 1 - 5 d): 30 mg/m3 Inhalation Read-across from supporting substance (structural analogue or surrogate), Key study |

| | |
|---|---|
| 2,6-Octadienal, 3,7-dimethyl- | LOAEL (Rat(Female, Male), Oral, 104 - 105 Weeks): 210 mg/kg Oral Experimental result, Key study<br>LOAEL (Rat(Female), Oral, 14 Weeks): 335 mg/kg Oral Experimental result, Key study |

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | in vivo (Rabbit): Not irritant Experimental result, Key study |
| Ethanol, 2-(2-butoxyethoxy)- | in vivo (Rabbit): Not irritant Experimental result, Supporting study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | in vivo (Rabbit): Not irritant Experimental result, Key study |

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | Rabbit, 1 - 24 hrs: Not irritating |
| Ethanol, 2-(2-butoxyethoxy)- | Rabbit, 24 - 72 hrs: Highly irritating |
| Sodium hydroxide (Na(OH)) | Corrosive<br>Rabbit, 2 d: 10% Sodium Hydroxide- Category 1; 0.5% Sodium Hydroxide- Slightly irritating to eyes |

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | Skin sensitization:, in vivo (Guinea pig): Non sensitising |
| Ethanol, 2-(2-butoxyethoxy)- | Skin sensitization:, in vivo (Guinea pig): Non sensitising |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | 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.
**Specified substance(s):**

| | |
|---|---|
| 2-Propanol, 2-methyl- | Inhalation - dust and mist: Respiratory tract irritation. - Category 3 with respiratory tract irritation. |

**Specific Target Organ Toxicity - Repeated Exposure**
**Product:** No data available.

**Aspiration Hazard**
**Product:** No data available.

**Other effects:** No data available.

## 12. Ecological information

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**
**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study |
| Ethanol, 2-(2-butoxyethoxy)- | LC 50 (Lepomis macrochirus, 96 h): 1,300 mg/l Experimental result, Key study<br>LC 50 (Pimephales promelas, 96 h): 2,400 mg/l Experimental result, Supporting study |
| Propane | LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study |
| Butane | LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | LC 50 (Lepomis macrochirus, 96 h): 121 mg/l Experimental result, Key study<br>NOAEL (Lepomis macrochirus, 96 h): 88 mg/l Experimental result, Key study |
| 2-Propanol, 2-methyl- | LC 50 (Pimephales promelas, 96 h): > 961 mg/l Experimental result, Key study<br>NOAEL (Pimephales promelas, 96 h): 961 mg/l Experimental result, Key study |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl] dimethyl, chlorides | EC 50 (96 h): < 10 mg/l |
| 2,6-Octadienal, 3,7-dimethyl- | LC 50 (Leuciscus idus, 96 h): 6.78 mg/l Experimental result, Key study |
| Sodium hydroxide (Na(OH)) | LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 125 mg/l Mortality<br>LC 50 (Gambusia affinis, 96 h): < 180 mg/l Experimental result, Supporting study |

**Aquatic Invertebrates**
**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study |
| Ethanol, 2-(2-butoxyethoxy)- | LC 50 (Daphnia magna, 48 h): +/- 1,743 mg/l QSAR QSAR, Supporting study |
| Butane | LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | EC 50 (Daphnia magna, 24 h): 610 mg/l Experimental result, Key study |
| 2-Propanol, 2-methyl- | NOAEL (Daphnia magna, 48 h): 180 mg/l Experimental result, Key study<br>EC 50 (Daphnia magna, 48 h): 933 mg/l Experimental result, Key study |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl] dimethyl, chlorides | EC 50 : 0.015 mg/l |
| 2,6-Octadienal, 3,7-dimethyl- | EC 50 (Daphnia magna, 48 h): 6.8 mg/l Experimental result, Key study |
| Sodium hydroxide (Na(OH)) | EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 34.59 - 47.13 mg/l Intoxication |

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | NOAEL (Oryzias latipes): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | NOAEL (Danio rerio): >= 25.7 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study |
| 2-Propanol, 2-methyl- | NOAEL (Clarias gariepinus): 332 mg/l Experimental result, Key study |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl] dimethyl, chlorides | NOEC (28 d): 0.032 mg/l |

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Ethanol | LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study<br>NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | NOAEL (Daphnia magna): 25 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study |

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

| | |
|---|---|
| **Product:** | No data available. |

**Specified substance(s):**

| | |
|---|---|
| Ethanol | 95 % Detected in water. Experimental result, Key study |
| Ethanol, 2-(2-butoxyethoxy)- | 85 % (28 d) Detected in water. Experimental result, Key study |
| Propane | 100 % (385.5 h) Detected in water. Experimental result, Key study<br>50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study |
| Butane | 100 % (385.5 h) Detected in water. Experimental result, Key study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | 90 - 100 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study |
| 2-Propanol, 2-methyl- | 2.6 - 5.1 % (29 d) Detected in water. Experimental result, Key study |
| 2,6-Octadienal, 3,7-dimethyl- | 85 - 95 % (28 d) Detected in water. Experimental result, Key study |

**BOD/COD Ratio**

| | |
|---|---|
| **Product:** | No data available. |

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

| | |
|---|---|
| **Product:** | No data available. |

**Specified substance(s):**

| | |
|---|---|
| Ethanol | Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | Lepomis macrochirus, Bioconcentration Factor (BCF): 1.8 Aquatic sediment Experimental result, Key study |
| 2,6-Octadienal, 3,7-dimethyl- | Bioconcentration Factor (BCF): 89.72 Aquatic sediment Estimated by calculation, Key study |

**Partition Coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| **Product:** | No data available. |

**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

| | |
|---|---|
| Ethanol | No data available. |
| Ethanol, 2-(2-butoxyethoxy)- | No data available. |
| Propane | No data available. |
| Butane | No data available. |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | No data available. |
| 2-Propanol, 2-methyl- | No data available. |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available. |
| 2,6-Octadienal, 3,7-dimethyl- | No data available. |
| Sodium hydroxide (Na(OH)) | No data available. |

**Other adverse effects:** No data available.

## 13. Disposal considerations

**Disposal instructions:** Wash before disposal. Dispose to controlled facilities.

**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):**

| Chemical Identity | Reportable quantity |
|---|---|
| Ethanol | lbs. 100 |
| Propane | lbs. 100 |
| Butane | lbs. 100 |
| 2-Propanol, 2-methyl- | lbs. 100 |
| Sodium hydroxide (Na(OH)) | lbs. 1000 |
| Ammonium hydroxide ((NH4)(OH)) | lbs. 1000 |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Fire Hazard
Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Flammable aerosol
Serious Eye Damage/Eye Irritation
Skin sensitizer
Specific Target Organ Toxicity - Repeated Exposure

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

| Chemical Identity | Reportable quantity |
|---|---|
| Ethanol | lbs. 100 |
| Ethanol, 2-(2-butoxyethoxy)- | |
| Propane | lbs. 100 |
| Butane | lbs. 100 |
| 2-Propanol, 2-methyl- | lbs. 100 |
| Sodium hydroxide (Na(OH)) | lbs. 1000 |
| Ethanol, 2-butoxy- | |
| Ammonium hydroxide ((NH4)(OH)) | lbs. 1000 |

**SARA 311/312 Hazardous Chemical**

| Chemical Identity | Threshold Planning Quantity |
|---|---|
| Ethanol | 10000 lbs |
| Ethanol, 2-(2-butoxyethoxy)- | 10000 lbs |
| Propane | 10000 lbs |
| Butane | 10000 lbs |
| Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) | 10000 lbs |
| 2-Propanol, 2-methyl- | 10000 lbs |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | 10000 lbs |
| 2,6-Octadienal, 3,7-dimethyl- | 10000 lbs |
| Sodium hydroxide (Na(OH)) | 10000 lbs |
| Ethanol, 2-butoxy- | 10000 lbs |
| Ammonium hydroxide ((NH4)(OH)) | 10000 lbs |

**SARA 313 (TRI Reporting)**

| Chemical Identity | Reporting threshold for other users | Reporting threshold for manufacturing and processing |
|---|---|---|
| Ethanol, 2-(2-butoxyethoxy)- | N230 lbs | N230 lbs. |

**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**
Ethanol
Ethanol, 2-(2-butoxyethoxy)-
Propane
Butane

**US. Massachusetts RTK - Substance List**

**Chemical Identity**
Glycine, N,N-bis(carboxymethyl)-, sodium salt (1:3)

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**
Ethanol
Ethanol, 2-(2-butoxyethoxy)-
Propane
Butane

**US. Rhode Island RTK**

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

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**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: | Not 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: | Not 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: | Not 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:** | 11/07/2019 |
| **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. |