CL1002 TECHNICAL DATA SHEET

CLAIRE DISINFECTANT SPRAY Q LEMON SCENT

Claire Disinfectant Spray Q EPA Reg. No. 706-111 has demonstrated effectiveness against viruses similar to 2019 Novel Coronavirus (2019-nCoV) on hard non-porous surfaces. Therefore, Claire Disinfectant Spray Q can be used against 2019 Novel Coronavirus (2019-nCoV) when used in accordance with the directions for use against Poliovirus type 1 on hard, non-porous surfaces.
Refer to the CDC website https://www.cdc.gov/coronavirus/2019-ncov/index.html for additional information.

PRODUCT DESCRIPTION:

- Hospital grade multipurpose disinfectant for hard, non-porous surfaces
- Soft spot surface sanitizer
- Controls mold and mildew
- Eliminates odors
- Kills 99.9% germs
- Bactericidal, Antibacterial, Fungicidal, *Virucidal, Tuberculocidal

Disinfects and kills the following bacteria and *Viruses in 3 minutes on pre-cleaned hard, non-porous surfaces:
Kills Bacteria: Pseudomonas aeruginosa (ATCC 15442), Salmonella enterica (ATCC 10708), Staphylococcus aureus (ATCC 6538), Acinetobacter baumanii Multi Drug Resistant (ATCC 19606), Carbapenem Resistant Escherichia coli (CDC 81371), Carbapenem Resistant Klebsiella pneumoniae (ATCC BAA-1705), Enterobacter aerogenes (ATCC 13048), Enterococcus faecium (ATCC 51559), Escherichia coli (ATCC 11229), Klebsiella pneumonia (ATCC 4352), Listeria monocytogenes (ATCC 19117), Staphylococcus aureus- MRSA (ATCC 33592), Staphylococcus aureus- CA-MRSA Genotype USA 300 (NARSA NRS 384), Staphylococcus aureus- CA-MRSA Genotype USA 400 (NARSA NRS 123), Shigella dysenteriae (ATCC 11835), Streptococcus pyogenes (ATCC 19615), Staphylococcus aureus –VISA (CDC HIP 5836), Enterococcus faecalis –VRE (ATCC 51575), Campylobacter jejuni (ATCC 29428), Candida albicans (ATCC 10231), Mycobacterium bovis (TB) (10 minute contact time).
***Viruses:** Adenovirus Type 2*, 2009-H1N1 Influenza A virus*, Influenza B virus*, Human Immunodeficiency virus type 1 (HIV-1)*, Herpes simplex virus type 1*, Herpes simplex virus type 2*, Rotavirus*, Vaccinia virus*, Rhinovirus type 37*.
Poliovirus type 1 in 5 minutes on pre-cleaned hard, non-porous surfaces.
Fungi: Trichophyton interdigitale (Athlete's Foot Fungus) (ATCC 9533) (10 minute contact time).

USE IN:
Healthcare, schools, hotels, restaurants, commercial establishments. Use in homes on toilets, sinks, showers, bathtubs, doorknobs, light switches, garbage cans, and high touch areas.
Sanitizes soft non-food contact surfaces such as upholstered furniture, stuffed pillows, draperies, etc.

SPECS:
Can Size: 20 oz.
Net Weight: 17 oz.
Shipping Weight: 17 Lbs.
Packaged: 12 cans per case
UPC Number: 7 13014 11002 2
GTIN: 10713014610024
Product Number: CL1002
Extender Tube: N

REGULATORY:
Ozone Depleting Compounds: None
Recyclable Package: Yes
VOC Compliant CARB: Yes
VOC Compliant OTC: Yes
NSF Certified: Yes
Flammability: Not required to be labeled as flammable

PHYSICAL CHARACTERISTICS:
Color: Colorless
Fragrance: Lemon
Shelf Life: 1 year +

See label side panel for First Aid and additional Precautionary Statements
24 HOUR MEDICAL EMERGENCY NUMBER:
1-866-836-8855

KEEP OUT OF REACH OF CHILDREN
CONSULT SDS BEFORE USING

2651 Warrenville Road, Suite 300 | Downers Grove, IL 60515
800-252-4731 | **www.clairemfg.com**

Ver. 2020-05-08

Version: 1.0
Revision Date: 06/11/2019

SAFETY DATA SHEET

1. Identification

Product identifier: CLAIRE DISINFECTANT SPRAY Q

Other means of identification
SDS number: RE1000038701

Recommended restrictions
Product Use: Disinfectant
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

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%
Ethanol, 2-butoxy-	111-76-2	0 - <0.1%
Ammonium hydroxide	1336-21-6	0 - <0.1%

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	TWA PEL	1,000 ppm 1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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)
	TWA	1,000 ppm 1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (2009)
	AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	18,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Ethanol, 2-(2-butoxyethoxy)-	ST ESL	670 µg/m3	US. Texas. Effects Screening Levels (Texas

				2016)
	ST ESL		100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		67 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
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 PEL	1,000 ppm	1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	1,000 ppm	1,800 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	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)
	TWA	800 ppm	1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	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)
	AN ESL		3,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		7,100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA PEL	800 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL		66,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		28,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
2-Propanol, 2-methyl-	TWA	100 ppm	300 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	150 ppm	450 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		20 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		62 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		620 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	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)

				Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	100 ppm	300 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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)
2,6-Octadienal, 3,7-dimethyl-	ST ESL		50 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		310 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		31 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		5 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
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)
	Ceiling		2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	Ceiling		2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
Sodium hydroxide (Na(OH)) - Particulate.	AN ESL		2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		20 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
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)
	TWA PEL	20 ppm	97 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	25 ppm	120 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL		760 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		3,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		2,900 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		600 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Ammonium hydroxide ((NH4)(OH))	AN ESL		92 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		180 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	35 ppm		US. ACGIH Threshold Limit Values (2008)

	TWA PEL	25 ppm	18 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	35 ppm	27 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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
Ethanol, 2-butoxy-	LD 50 (Rabbit): 667 mg/kg

Inhalation

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

Specified substance(s):

Ethanol	LC 50 (Rat): 124.7 mg/l
Ethanol, 2-(2-butoxyethoxy)-	LC 50 (Various): > 20 mg/l
Propane	LC 50 (Mouse): 1,237 mg/l
Butane	LC 50 (Mouse): 1,237 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 LC 50: > 20 mg/l
Ethanol, 2-butoxy-	LC 50: < 5 mg/l LC 50: < 20 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 NOAEL (Rat(Female, Male), Dermal, 13 Weeks): > 2,000 mg/kg Dermal Experimental result, Key study 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 LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Butane	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
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 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 LOAEL (Rat(Female), Oral, 14 Weeks): 335 mg/kg Oral Experimental result, Key study
Ethanol, 2-butoxy-	NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation 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
Ethanol, 2-butoxy-	in vivo (Rabbit): Irritating 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 Rabbit, 2 d: 10% Sodium Hydroxide- Category 1; 0.5% Sodium Hydroxide- Slightly irritating to eyes
Ethanol, 2-butoxy-	Rabbit, 24 - 72 hrs: Irritating

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
Ethanol, 2-butoxy-	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 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 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 NOAEL (Pimephales promelas, 96 h): 961 mg/l Experimental result, Key study
Quaternary ammonium compounds, C12-14	EC 50 (96 h): < 10 mg/l

alkyl[(ethylphenyl)methyl] dimethyl, chlorides	
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 LC 50 (Gambusia affinis, 96 h): < 180 mg/l Experimental result, Supporting study
Ethanol, 2-butoxy-	LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study
Ammonium hydroxide ((NH4)(OH))	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 15 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 48 h): 7 mg/l Mortality

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 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
Ethanol, 2-butoxy-	EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study
Ammonium hydroxide ((NH4)(OH))	LC 50 (Water flea (Ceriodaphnia dubia), 48 h): > 0 - 10 mg/l Mortality

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

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
Ethanol, 2-butoxy-	NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol	LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study 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
Ethanol, 2-butoxy-	EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study EC 10 (Daphnia magna): 134 mg/l Experimental result, 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 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence 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
Ethanol, 2-butoxy-	90.4 % 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.
Ethanol, 2-butoxy-	No data available.
Ammonium hydroxide ((NH4)(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

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)

	threshold for other users	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:	06/11/2019
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.