



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. Specific treatment (see on this label). Wash contaminated clothing before reuse.

Storage: Protect from sunlight. Store in a well-ventilated place.

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	1 - <5%
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)	64-02-8	1 - <3%
Ethanol, 2-butoxy-	111-76-2	1 - <5%
Propane	74-98-6	1 - <5%
Terpenes and Terpenoids, lemon-oil	68917-33-9	0.1 - <1%

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

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

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.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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: Get medical attention if symptoms occur.



5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Stop flow of gas. 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: Pressurized container may explode when exposed to heat or flame.

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: 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.

Accidental release measures: 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.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): No data available.

Safe handling advice: Avoid contact with eyes. Wash hands thoroughly after handling. Avoid contact with eyes, skin, and clothing.

Contact avoidance measures: No data available.



Storage

Safe storage conditions: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Protect from sunlight. Store in a cool place. Aerosol Level 1

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
Butane	REL	800 ppm	1,900 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	800 ppm	1,900 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethanol, 2-butoxy-	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	5 ppm	24 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	50 ppm	240 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Propane	TWA	25 ppm	120 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	1,000 ppm	1,800 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	1,000 ppm	1,800 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,800 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
1,2-Ethanediol	Ceiling	50 ppm	125 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
1,2-Ethanediol - Vapor fraction	TWA	25 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	50 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL		10 mg/m ³	US. ACGIH Threshold Limit Values, as amended
1,2-Ethanediol - Aerosol, inhalable.	STEL		10 mg/m ³	US. ACGIH Threshold Limit Values, as amended
	Ceil Time		2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL		2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	Ceiling		2 mg/m ³	US. ACGIH Threshold Limit Values, as amended
	Ceiling		2 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
2,6-Octadienal, 3,7-dimethyl- - Inhalable fraction and vapor.	TWA	5 ppm		US. ACGIH Threshold Limit Values, as amended
Ammonium hydroxide ((NH ₄)(OH))	STEL	35 ppm	27 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	35 ppm	27 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	25 ppm	18 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	35 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	25 ppm		US. ACGIH Threshold Limit Values, as amended
	PEL	50 ppm	35 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- - Inhalable fraction and vapor.	TWA		2 mg/m ³	US. ACGIH Threshold Limit Values, as amended
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	REL		10 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA		10 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
2-Ethoxyethanol	TWA	5 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	0.5 ppm	1.8 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	200 ppm	740 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	200 ppm	740 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Silica	REL		6 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended



	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
	TWA	6 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	0.8 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended

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
2-Ethoxyethanol (2-Ethoxyacetic acid: Sampling time: End of shift at end of work week.)	100 mg/g (Creatinine in urine)	ACGIH BEL

Exposure guidelines

2,6-Octadienal, 3,7-dimethyl-	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
2-Ethoxyethanol	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Skin and Body Protection: 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. 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.
- Freezing point:** No data available.
- Boiling Point:** Estimated 100 °C
- Flash Point:** Not applicable
- Evaporation Rate:** No data available.
- Flammability (solid, gas):** Non-flammable Aerosol
- Explosive limit - upper (%):** No data available.
- Explosive limit - lower (%):** No data available.



Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	Estimated 0.987 g/cm ³
Relative density:	No data available.
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	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: 45,269.6 mg/kg

Dermal

Product: ATEmix: 55,789.47 mg/kg

Inhalation

Product: ATEmix: 578.95 mg/l Vapour
ATEmix : 157.89 mg/l Dusts, mists and fumes

Repeated dose toxicity

Product: No data available.

Components:

Butane
LOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 12,000 ppm(m) Inhalation
Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 4,000 ppm(m) Inhalation
Experimental result, Key study

Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)
LOAEL (Rat(Male), Inhalation, 1 - 5 d): 30 mg/m³ Inhalation Read-across from supporting substance (structural analogue or surrogate), Key study

Ethanol, 2-butoxy-
NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation
Experimental result, Key study
NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study
NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal
Experimental result, Key study

Propane
NOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 4,000 ppm(m) Inhalation
Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 12,000 ppm(m) Inhalation
Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Components:

Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)
in vivo (Rabbit): Not irritant

Ethanol, 2-butoxy-
Terpenes and Terpenoids, lemon-oil
in vivo (Rabbit): Irritating estimated Irritating.

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

Ethanol, 2-butoxy-
Rabbit, 24 - 72 hrs: Irritating

Respiratory or Skin Sensitization

Product: No data available.



Components:

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), as amended:

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.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

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)	NOAEL (Lepomis macrochirus, 96 h): 88 mg/l Experimental result, Key study LC 50 (Lepomis macrochirus, 96 h): 121 mg/l Experimental result, Key study
Ethanol, 2-butoxy-	LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study



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

Terpenes and
Terpenoids, lemon-oil EC 50 (96 h): 5.65 mg/l

Aquatic Invertebrates

Product: No data available.

Components:

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

Ethanol, 2-butoxy- EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study

Terpenes and
Terpenoids, lemon-oil EC 50 (48 h): 1.1 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) NOAEL (Danio rerio): \geq 25.7 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study

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

Aquatic Invertebrates

Product: No data available.

Components:

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 10 (Daphnia magna): 134 mg/l Experimental result, Key study
EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product: No data available.

Components:

Terpenes and
Terpenoids, lemon-oil EC 50 (72 h): 8 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

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
Ethanol, 2-butoxy-	90.4 % 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
Terpenes and Terpenoids, lemon-oil	> 70 %

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

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

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Components:

Butane No data available.
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) No data available.
Ethanol, 2-butoxy- No data available.
Propane No data available.
Terpenes and Terpenoids, lemon-oil 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, non-flammable
Transport Hazard Class(es) Class: 2.2
Label(s): -
EmS No.: -
Packing Group: -
Special precautions for user: None known.



IATA

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es):
Class: 2.2
Label(s): –
Packing Group: –
Special precautions for user: None known.
Other information
Passenger and cargo aircraft: Allowed. 203
Cargo aircraft only: Allowed. 203

IMDG

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es):
Class: 2.2
Label(s): –
EmS No.:
Packing Group: –
Special precautions for user: None known.

The classification shown in this section may be eligible for use of an exception, such as "Limited Quantity", per the dangerous goods regulations. The shipper of this product should consult the applicable mode's regulation for the UN number displayed above to determine if any exceptions are available and may be utilized, at the shipper's discretion.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY
RCRA HAZARDOUS WASTE NO. D001
GLYCOL ETHERS
Terpenes and Terpenoids, sweet orange-oil
SODIUM NITRITE
Terpenes and Terpenoids, lemon-oil
ETHYLENE GLYCOL
SODIUM HYDROXIDE
AMMONIUM HYDROXIDE
Cyclohexene, 1-methyl-4-(1-methylethylidene)-
ETHYLENE GLYCOL MONOETHYL ETHER
2-ETHOXYETHANOL



Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Gas under pressure, Serious eye damage or eye irritation, Respiratory or Skin Sensitization

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

<u>Chemical Identity</u>	<u>% by weight</u>
Ethanol, 2-butoxy-	1.0%
Diethylene glycol monoethyl ether	1.0%

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



WARNING: This product can expose you to chemicals including, 1,2-Ethanediol, 2-Ethoxyethanol which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

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

Chemical Identity

Butane
Ethanol, 2-butoxy-
Diethylene glycol monoethyl ether
Propane

US. Massachusetts RTK - Substance List

Chemical Identity

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

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Butane
Ethanol, 2-butoxy-
Diethylene glycol monoethyl ether
Propane

US. Rhode Island RTK

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

International regulations

Montreal protocol

Terpenes and Terpenoids, sweet orange-oil
Terpenes and Terpenoids, lemon-oil

Stockholm convention

Terpenes and Terpenoids, sweet orange-oil
Terpenes and Terpenoids, lemon-oil



Rotterdam convention

Terpenes and Terpenoids, sweet orange-oil
Terpenes and Terpenoids, lemon-oil

Kyoto protocol

Inventory Status:

Australia AICS	Not in compliance with the inventory.
Canada DSL Inventory List	On or in compliance with the inventory
Canada NDSL Inventory	Not in compliance with the inventory.
Ontario Inventory	Not in compliance with the inventory.
Japan (ENCS) List	Not in compliance with the inventory.
Japan ISHL Listing	Not in compliance with the inventory.
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	Not in compliance with the inventory.
Mexico INSQ	Not in compliance with the inventory.
Philippines PICCS	Not in compliance with the inventory.
US TSCA Inventory	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.
China Inv. Existing Chemical Substances	On or in compliance with the inventory
New Zealand Inventory of Chemicals	On or 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: 11/03/2021

Revision Information: No data available.

Version #: 1.0

Further Information: No data available.

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.