

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : UltraClean

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Cleaner

1.3. Supplier

BioChem Systems, Inc.
480 Wildwood Forest Drive
Suite 400
Spring, TX 77380
1 (800) 777-7870

1.4. Emergency telephone number

Emergency number : PERS - (800) 633-8253

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Aerosol 1 H222
Skin Irrit. 2 H315
Skin Sens. 1 H317
Asp. Tox. 1 H304

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H222 - Extremely flammable aerosol.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.

Precautionary statements (GHS US) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P310 - IF SWALLOWED: Immediately call a doctor, a poison center
P302+P352 - If on skin: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Terpenes and Terpenoids, sweet orange-oil	Proprietary	80 – 100
Carbon Dioxide (as compressed gas)	(CAS-No.) 124-38-9	3 – 7

*In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

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4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May be fatal if swallowed and enters airways. Causes skin irritation.
Symptoms/effects after inhalation : May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact : May cause skin irritation.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical. Water fog.
Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable aerosol.
Explosion hazard : Heating may cause an explosion.
Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Use special care to avoid static electric charges. Avoid breathing fumes or vapours. No flames, no sparks. Eliminate all sources of ignition. Vapor may cause flash fires. Vapors are heavier than air and can travel long distances to ignition sources.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Eliminate ignition sources. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters.

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing vapours, mist. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue and can be hazardous.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Terpenes and Terpenoids, sweet orange-oil		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established
Carbon Dioxide (as compressed gas) (124-38-9)		
ACGIH	ACGIH OEL TWA [ppm]	5000 ppm
ACGIH	ACGIH OEL STEL [ppm]	30000 ppm
OSHA	OSHA PEL TWA [1]	9000 mg/m ³
OSHA	OSHA PEL TWA [2]	5000 ppm
OSHA	OSHA PEL STEL [1]	54000 mg/m ³
OSHA	OSHA PEL STEL [2]	30000 ppm
IDLH	IDLH [ppm]	40000 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

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8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):



Personal protective equipment:

Gloves. Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection:

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with gas filter (type A2). Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Aerosol / Liquid
Appearance	: Liquid Mist
Colour	: Clear
Odour	: Orange
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Elevated temperature. Prevent vapour accumulation.

10.5. Incompatible materials

Strong oxidizing agents, reducing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Terpenes and Terpenoids, sweet orange-oil

LD50 oral rat	4400 mg/kg Source: HNSO CCID
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Carbon Dioxide (as compressed gas) (124-38-9)

LD50 oral rat	study technically not feasible
LD50 dermal rat	study technically not feasible
LC50 Inhalation - Rat	not classified

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified

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Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
Symptoms/effects	: May be fatal if swallowed and enters airways. Causes skin irritation.
Symptoms/effects after inhalation	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment. Container under pressure. Do not drill or burn even after use.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description (DOT) : UN1950 Aerosols (Limited quantity), 2.1

UN-No. (DOT) : UN1950

Proper Shipping Name (DOT) : Aerosols

Class (DOT) : Limited quantity

Hazard labels (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : LTD QTY - Limited quantity

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 75 kg

DOT Special Provisions (49 CFR 172.102) : 150 kg

DOT Packaging Exceptions (49 CFR 173.xxx) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Non Bulk (49 CFR 173.xxx) : 306

DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Vessel Stowage Location : None

DOT Vessel Stowage Other : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number : 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126

Other information : - Segregation same as for Class 9, miscellaneous hazardous materials

Other information : 126

Other information : No supplementary information available.

Transport by sea (IMDG)

Transport document description (IMDG) : UN 1950 AEROSOLS (Limited quantity), 2.1

UN-No. (IMDG) : 1950

Proper Shipping Name (IMDG) : AEROSOLS

Class (IMDG) : 2 - Gases

Danger labels (IMDG) :

Special provisions (IMDG) : 63, 190, 277, 327, 344, 959

Limited quantities (IMDG) : SP277

Excepted quantities (IMDG) : E0

Packing instructions (IMDG) : P207, LP02

Special packing provisions (IMDG) : PP87, L2

Stowage category (IMDG) : None

Air transport (IATA)

Transport document description (IATA) : UN 1950 Aerosols (limited quantity), 2.1

UN-No. (IATA) : 1950

Proper Shipping Name (IATA) : Aerosols, flammable

Class (IATA) : 2 - Gases

Danger labels (IATA) :

PCA Excepted quantities (IATA) : E0

PCA Limited quantities (IATA) : Y203

PCA limited quantity max net quantity (IATA) : 30kgG

PCA packing instructions (IATA) : 203

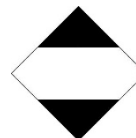
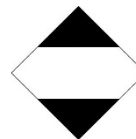
CAO max net quantity (IATA) : 75kg

CAO packing instructions (IATA) : 203

CAO max net quantity (IATA) : 150kg

Special provisions (IATA) : A145, A167, A802

ERG code (IATA) : 10L



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SECTION 15: Regulatory information

15.1. US Federal regulations

UltraClean	
All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt.	
SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Aspiration hazard Health hazard - Skin corrosion or Irritation

15.2. International regulations

No additional information available

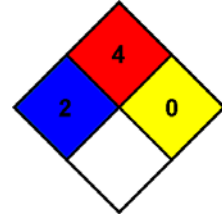
15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Component	State or local regulations
Carbon Dioxide (as compressed gas) (124-38-9)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

SECTION 16: Other information

Other information	: Revised by: Regulatory & Compliance.
Other information	: Revision: 10/17/2023
NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 4 - Materials that rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and burn readily.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
HMIS Hazard Rating	
Health	: 2
Flammability	: 4
Physical	: 0



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.