1. IDENTIFICATION

Product identifier

Product Name

Other means of identification

Product Code

UN/ID no

Synonyms

Recommended use of the chemical and restrictions on use

Recommended Use

Uses advised against

Details of the supplier of the safety data sheet

Supplier Identification

Address

Telephone

Supplier E-mail

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germ cell mutagenicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Flammable aerosols</td>
<td>Category 2</td>
</tr>
<tr>
<td>Gases under pressure</td>
<td>Liquefied gas</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
May cause genetic defects
May cause cancer
Flammable aerosol
Contains gas under pressure; may explode if heated
Appearance | Spray  
| Physical state | Aerosol Aerosol (Liquid Spray)  
| Odor | No information available  

Precautionary Statements - Prevention  
Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Pressurized container: Do not pierce or burn, even after use  
Do not spray on an open flame or other ignition source  

Precautionary Statements - Response  
IF exposed or concerned: Get medical advice/attention  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  

Precautionary Statements - Storage  
Store locked up  
Protect from sunlight. Store in a well-ventilated place  
Do not expose to temperatures exceeding 122 °F (50 °C)  

Precautionary Statements - Disposal  
Dispose of contents/container to an approved waste disposal plant  

Hazards not otherwise classified (HNOC)  
Not applicable  

Other Information  
Not applicable  

Unknown acute toxicity  
97.898% of the mixture consists of ingredient(s) of unknown toxicity  

### 3. COMPOSITION/INFORMATION ON INGREDIENTS  

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>15 - 40</td>
<td></td>
</tr>
<tr>
<td>Isobutane</td>
<td>75-28-5</td>
<td>1 - 5</td>
<td></td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES  

**Description of first aid measures**  

**Eye contact**  
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
**Skin contact**
Discontinue use of product. Wash affected area with soap and water. If discomfort persists, consult a physician.

**Inhalation**
If respiratory irritation occurs, remove individual to fresh air. If discomfort persists, consult a physician. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. If breathing is affected due to intentional inhalation, remove patient to fresh air, get emergency attention, and administer artificial respiration and/or oxygen.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

---

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Hazardous combustion products**
Hydrocarbons, Volatile organic compounds, Halocarbons, Dimethyl Ether

**Explosion data**
- **Sensitivity to Mechanical Impact**: No information available.
- **Sensitivity to Static Discharge**: May be ignited by heat, sparks or flames.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

---

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Ensure adequate ventilation, especially in confined areas.

**For emergency responders**
Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction. Remove all sources of ignition. Pay attention to flashback. Wear respiratory protection. Ventilate the area.

**Environmental precautions**

**Environmental precautions**
The product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with conventional solid waste management practices. Aerosol containers are recyclable when empty.

**Methods and material for containment and cleaning up**
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Flammable. Avoid heat, sparks, flame, or smoking during use. Use only in well-ventilated areas. Contents under pressure. Do not crush, puncture or incinerate. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Store as an aerosol under the proper aerosol classification level in accordance with NFPA 30B. Store in a cool, dry, well-ventilated area below 120°F. Warehousing should be in compliance with local, state, and federal codes, as well as the regulations of your insurance carrier.

Packaging materials
No information available.

Incompatible materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane 106-97-8</td>
<td>STEL: 1000 ppm explosion hazard</td>
<td>(vacated) TWA: 800 ppm</td>
<td>IDLH: 1600 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td>TWA: 800 ppm</td>
</tr>
<tr>
<td>Isobutane 75-28-5</td>
<td>STEL: 1000 ppm explosion hazard</td>
<td>-</td>
<td>TWA: 800 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA: 1900 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Avoid contact with eyes.

Skin and body protection
No special technical protective measures are necessary.

Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
<th>Odor</th>
<th>Odor threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol Aerosol (Liquid Spray)</td>
<td>Spray</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>
### Property Values

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point concentrate</td>
<td>78.37</td>
<td></td>
</tr>
<tr>
<td>Boiling point propellant</td>
<td>-25</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point concentrate</td>
<td>125.6</td>
<td></td>
</tr>
<tr>
<td>Flash point propellant</td>
<td>-91.23</td>
<td></td>
</tr>
<tr>
<td>Flash point propellant</td>
<td>-132.23</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>&lt;50%</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.8052 - 0.9052 g/cc</td>
<td></td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

#### Reactivity

≤50%

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Extremes of temperature and direct sunlight.

#### Incompatible materials

None known based on information supplied.
Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information None known

Inhalation None known.

Eye contact None known.

Skin contact None known.

Ingestion None known.

Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50
---|---|---|---
Butane 106-97-8 | - | - | = 658 g/m³ (Rat) 4 h
Isobutane 75-28-5 | - | - | = 658 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms None known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization None known.

Germ cell mutagenicity None known.

Carcinogenicity None known.

Reproductive toxicity None known.

STOT - single exposure None known.

STOT - repeated exposure None known.

Aspiration hazard None known.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 1,183.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeolite 1318-02-1</td>
<td>18: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1800: 96 h Brachydanio rerio mg/L LC50 semi-static 3200 - 5600: 96 h Oryzias latipes mg/L LC50 semi-static 1800 - 3200: 96 h Poecilia reticulata mg/L LC50 semi-static</td>
<td>1000 - 1800: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Glycerin 56-81-5</td>
<td>-</td>
<td>51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static</td>
<td>500: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and degradability

No information available.

Bioaccumulation
None known.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane 106-97-8</td>
<td>2.89</td>
</tr>
<tr>
<td>Isobutane 75-28-5</td>
<td>2.88</td>
</tr>
</tbody>
</table>

Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Regulated

UN/ID no: UN 1950 IMCO Class 2.1
Proper shipping name: Aerosols, Flammable - Limited Quantity
Hazard Class: 2.1
Packing Group: N/A

IATA

Regulated

UN/ID no: UN 1950 IMCO Class 2.1
Proper shipping name: Aerosols, Flammable - Limited Quantity
Hazard Class: 2.1
Packing Group: N/A

IMDG

Regulated

UN/ID no: UN 1950 IMCO Class 2.1
Proper shipping name: Aerosols, Flammable - Limited Quantity
Hazard Class: 2.1
Packing Group: N/A
EmS-No: Chemtrec 1-800-424-9300

15. REGULATORY INFORMATION

International Inventories

TSCA: Does not comply
DSL/NDSL: Does not comply
EINECS/ELINCS: Does not comply
ENCS: Does not comply
IECSC: Does not comply
KECL: Does not comply
PICCS  Does not comply
AICS  Does not comply

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECS - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute health hazard  No
- Chronic Health Hazard  No
- Fire hazard  No
- Sudden release of pressure hazard  No
- Reactive Hazard  No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number  Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Personal protection X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Issue Date  28-Mar-2023
Revision Date  28-Mar-2023
Revision Note  No information available

Disclaimer:
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination
with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet