

# SIEVERT® Sievert Propane

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.  
Issue date: 6/2/2023 Revision date: 2/8/2024 Version: 2.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Sievert Propane  
Product code : 220977

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Gas used for propane torches

#### 1.3. Supplier

##### Distributor

Rothenberger USA, Inc.  
7130 Clinton Road  
Loves Park, IL 61111  
USA  
T 800-545-7698

#### 1.4. Emergency telephone number

Emergency number : ChemTel - Domestic: 1-800-255-3924, International: +1-813-248-0582;  
Contract number: MIS9223846

### SECTION 2: Hazard(s) identification


#### 2.1. Classification of the substance or mixture

##### GHS US classification

Flam. Gas 1	Extremely flammable gas
Gases Under Pressure	Contains gas under pressure; may explode if heated
Simple Asphy	May displace oxygen and cause rapid suffocation

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Extremely flammable gas  
Contains gas under pressure; may explode if heated  
May displace oxygen and cause rapid suffocation

Precautionary statements (GHS US) : Keep out of reach of children  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
Eliminate all ignition sources if safe to do so.  
Protect from sunlight. Store in a well-ventilated place.

#### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Contact with the liquefied gas may cause frostbite.

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### 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	%
Propane	CAS-No.: 74-98-6	80 - 100
n-Butane	CAS-No.: 106-97-8	0.01 - < 5
Isobutane	CAS-No.: 75-28-5	0.01 - < 5

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists. If frostbite occurs thaw frosted parts with lukewarm water. Do not rub affected area. Do not use hot water.
First-aid measures after eye contact	: 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 frostbite occurs thaw frosted parts with lukewarm water. Do not rub affected area. Do not use hot water.
First-aid measures after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Symptoms/effects	: Contains Liquefied gas; may cause cryogenic burns or injury.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause frostbite on contact the liquefied gas.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact the liquefied gas.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### 4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use water jet. Foam.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable gas. Products of combustion may include, and are not limited to: oxides of carbon. Asphyxiant gas. Toxic fumes.  
Explosion hazard : May form flammable/explosive vapor-air mixture. Ruptured cylinders may rocket.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.  
Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Eliminate every possible source of ignition.

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Remove all sources of ignition. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. Provide ventilation. Wear recommended personal protective equipment.  
Methods for cleaning up : Isolate the hazard area and deny entry to unnecessary and unprotected personnel . Provide ventilation.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

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Precautions for safe handling	: Avoid contact with skin and eyes. Do not breathe gas, vapors. Do not swallow. Wear appropriate PPE (see Section 8). Handle and open container with care. When using do not eat or drink. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only in well ventilated areas. Use only non-sparking tools. Proper grounding procedures to avoid static electricity should be followed. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Wash contaminated clothing before reuse. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store away from direct sunlight or other heat sources. Protect containers from physical damage. Keep away from incompatible materials.
Storage temperature	: Store in a well-ventilated place. Store at temperatures not exceeding 50 °C/ 122 °F.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Sievert Propane</b>	
No additional information available	
<b>Propane (74-98-6)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
Regulatory reference	ACGIH 2020
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Propane
OSHA PEL TWA	1800 mg/m <sup>3</sup>
OSHA PEL TWA	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH	2100 ppm (10% LEL)
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL (TWA)	1800 mg/m <sup>3</sup>
NIOSH REL (TWA)	1000 ppm
<b>n-Butane (106-97-8)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL STEL	1000 ppm (explosion hazard (Butane, isomers))
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH	1600 ppm (>10% LEL)
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL (TWA)	1900 mg/m <sup>3</sup>

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<b>n-Butane (106-97-8)</b>	
NIOSH REL (TWA)	800 ppm
<b>Isobutane (75-28-5)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Isobutane
ACGIH OEL STEL	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2021
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL (TWA)	1900 mg/m <sup>3</sup>
NIOSH REL (TWA)	800 ppm

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.
<b>Eye protection:</b>
Safety glasses or goggles are recommended when using product.
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

#### Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquified Gas
Color	: Colorless
Odor	: Pungent
Odor threshold	: No data available
pH	: Not relevant
Melting point	: -187 °C (-304.6 °F)
Freezing point	: No data available
Boiling point	: -42 °C (-43.6 °F)
Critical temperature	: 96.5 °C (propane) – 151 °C (butane)/ 205.7 °F (propane) –303.8 °F (butane)

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Flash point	: -104 °C (-155.2 °F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Extremely flammable gas.
Vapor pressure	: 7.5 bar (ASTM D 1267)
Relative vapor density	: 1.86 kg/m <sup>3</sup>
Relative density	: No data available
Density	: 505 – 510 kg/m <sup>3</sup> (15 °C / 59 °F - EN ISO 3993)
Solubility	: Negligible.
Partition coefficient n-octanol/water	: Not relevant
Auto-ignition temperature	: 468 °C (874.4 °F)
Decomposition temperature	: Not applicable
Viscosity, kinematic	: Not relevant
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 1.86 vol % Upper explosion limit: 9.5 vol %
Explosive properties	: Formation of explosive air/vapour mixtures are possible.
Oxidizing properties	: Non oxidizing material.

### 9.2. Other information

Gas group	: Press. Gas (Liq.)
Thermic conductivity (liquid phase, W/m x °C)	: $13 \times 10^{-2}$ (15 °C/ 59 °F)
Electric conductivity (liquid phase, S x m <sup>-1</sup> )	: Butane $1 + 5 \times 10^{-12}$ ; Propane $0.1 + 0.5 \times 10^{-12}$

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use. Not corrosive to metals.

### 10.2. Chemical stability

Stable under normal conditions. Extremely flammable gas. Contains gas under pressure; may explode if heated.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Heat. Sources of ignition. Direct sunlight. Avoid static electricity discharges. Incompatible materials.

### 10.5. Incompatible materials

Oxidizing agents. Natural rubber.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. 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

#### Propane (74-98-6)

LC50 inhalation rat	> 800000 ppm (Exposure time: 15 min)
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<b>n-Butane (106-97-8)</b>	
LC50 inhalation rat	658 g/m <sup>3</sup> (Exposure time: 4 h)
<b>Isobutane (75-28-5)</b>	
LC50 inhalation rat	> 800000 ppm (Exposure time: 15 min)
Skin corrosion/irritation	: Not classified pH: Not relevant
Serious eye damage/irritation	: Not classified pH: Not relevant
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not applicable
Viscosity, kinematic	: Not relevant
Symptoms/effects	: Contains Liquefied gas; may cause cryogenic burns or injury.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause frostbite on contact the liquefied gas.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact the liquefied gas.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

### 12.2. Persistence and degradability

<b>Sievert Propane</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Sievert Propane</b>	
Partition coefficient n-octanol/water (Log Kow)	Not relevant
Bioaccumulative potential	Not established.

<b>Propane (74-98-6)</b>	
Partition coefficient n-octanol/water	1.09 (at 20 °C (at pH 7)

<b>n-Butane (106-97-8)</b>	
Partition coefficient n-octanol/water	2.31 (at 20 °C (at pH 7)

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### Isobutane (75-28-5)

BCF - Fish [1]	1.57 – 1.97
Partition coefficient n-octanol/water	1.09 – 2.8 (at 20 °C (at pH 7))

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.  
Other information : No other effects known.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
Additional information : Handle empty containers with care because residual vapors are flammable.

## SECTION 14: Transport information

In accordance with DOT

### 14.1. UN number

DOT NA No : UN1978

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Propane

### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 2.1  
Hazard labels (DOT) : 2.1



### 14.4. Packing group

Packing group (DOT) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable



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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

#### 15.2. International regulations

No additional information available

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date : 06/02/2023  
Revision date : 02/08/2024  
Other information : None.  
Prepared by : Nexreg Compliance Inc.  
[www.Nexreg.com](http://www.Nexreg.com)



Full text of H-phrases	
Flam. Gas 1	Flammable gases Category 1
Press. Gas (Liq.)	Gases under pressure Liquefied gas
Simple Asphy	Simple Asphyxiant

Indication of changes:			
Section	Changed item	Change	Comments
1.3	Supplier information	Modified	V 2.0
2.1	GHS-US classification	Added	V 2.0
3	Composition/Information on ingredients	Modified	V 2.0
SDS	SDS update	Modified	V 2.0

Safety Data Sheet (SDS), USA

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