# Isoprene (0.00001% - 0.0999%), Isobutylene (0.00001% - 20.00%) in n-Hexane

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/15/2015 Version: 2.0

## SECTION 1: Identification

### 1.1. Identification

Product form : Mixture

Product name : Isoprene (0.00001% - 0.0999%), Isobutylene (0.00001% - 20.00%) in n-Hexane

Product code : SG-2003-03162

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Test gas/Calibration gas.

### 1.3. Details of the supplier of the safety data sheet

Air Liquide
9811 Katy Freeway, Suite 100
Houston, TX 77024 - USA
T 1-800-819-1704
www.us.airliquide.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**

| | | |
|---|---|---|
| Flam. Gas 1 | H220 - | Extremely flammable gas |
| Liquefied gas | H280 - | Contains gas under pressure; may explode if heated |
| Skin Irrit. 2 | H315 - | Causes skin irritation |
| Eye Irrit. 2A | H319 - | Causes serious eye irritation |
| Repr. 2 | H361 - | Suspected of damaging fertility or the unborn child |
| STOT SE 3 | H336 - | May cause drowsiness or dizziness |
| STOT RE 2 | H373 - | May cause damage to organs (central nervous system) through prolonged or repeated exposure |
| Asp. Tox. 1 | H304 - | May be fatal if swallowed and enters airways |

Full text of H-phrases: see section 16

### 2.2. Label elements

**GHS-US labeling**

Hazard pictograms (GHS-US) :

GHS02 GHS04 GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H220 - Extremely flammable gas
H280 - Contains gas under pressure; may explode if heated
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure
OSHA-H01 - May displace oxygen and cause rapid suffocation
CGA-HG04 - May form explosive mixtures with air

Precautionary statements (GHS-US) :
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P260 - Do not breathe gas
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective gloves, protective clothing
P301+P310 - If swallowed: Immediately call a doctor
P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention
P331 - Do NOT induce vomiting
P362 - Take off contaminated clothing and wash it before reuse
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely
P381 - Eliminate all ignition sources if safe to do so
P403 - Store in a well-ventilated place
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)
CGA-PG05 - Use a back flow preventive device in the piping
CGA-PG06 - Close valve after each use and when empty
CGA-PG10 - Use only with equipment rated for cylinder pressure
CGA-PG14 - Approach suspected leak area with caution
CGA-PG21 - Open valve slowly

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|---|---|---|---|
| n-Hexane | (CAS No) 110-54-3 | 79.9001 - 99.99998 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Repr. 2, H361<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |
| Isobutylene | (CAS No) 115-11-7 | 0.00001 - 20 | Flam. Gas 1, H220<br>Liquefied gas, H280 |
| Isoprene | (CAS No) 78-79-5 | 0.00001 - 0.0999 | Flam. Liq. 1, H224<br>Muta. 2, H341<br>Carc. 1B, H350<br>Aquatic Chronic 2, H411 |

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs, seek medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May displace oxygen and cause rapid suffocation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

Symptoms/injuries upon intravenous administration : Not known.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs (Central nervous system.) through prolonged or repeated exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is flammable.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapor-air mixture.

Reactivity : None known.

### 5.3. Advice for firefighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire fighters. Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Ensure adequate ventilation.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment consistent with the site emergency plan.

Emergency procedures : Escape the danger area by the closest safe route. Close doors and windows of adjacent premises. Keep containers closed. Mark the danger area. Seal off low-lying areas. Keep upwind.

#### 6.1.2. For emergency responders

Protective equipment : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire fighters. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate and limit access. Ventilate area. Remove ignition sources. Monitor concentration of released product. Consider the risk of potentially explosive atmospheres. Wear self-contained breathing apparatus when entering atmospheres of unknown contaminant concentration until proven to be safe.

### 6.2. Environmental precautions

Try to stop release if safe to do so.

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

For containment : Try to stop release if safe to do so.

Methods for cleaning up : Dispose of this material and its container in accordance with local regulations.

### 6.4. Reference to other sections

See also Sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Handle empty containers with care because residual vapors are flammable. In use, may form flammable vapor-air mixture.

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Use only non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product.

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

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

| | | |
|---|---|---|
| Storage conditions | : | Do not expose to temperatures exceeding 52°C (125°F). Keep container closed when not in use. Protect cylinder from physical damage. Store in well ventilated area. Store locked up. |
| Incompatible products | : | None known. |
| Incompatible materials | : | Oxidizing materials. Air. |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| n-Hexane (110-54-3) | | |
|---|---|---|
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| OSHA | OSHA PEL (TWA) (mg/m³) | 1800 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |

| Isobutylene (115-11-7) | | |
|---|---|---|
| DNEL | DNEL | ≈ |

### 8.2. Exposure controls

| | | |
|---|---|---|
| Appropriate engineering controls | : | Ensure exposure is below occupational exposure limits. Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Oxygen detectors should be used when asphyxiating gases may be released. Consider work permit system e.g. for maintenance activities. |
| Hand protection | : | Wear working gloves when handling gas containers. 29 CFR 1910.138: Hand Protection. |
| Eye protection | : | Wear safety glasses with side shields. 29 CFR 1910.133: Eye and Face Protection. |
| Skin and body protection | : | Wear suitable protective clothing, e.g. - lab coats, coveralls or flame resistant clothing. |
| Respiratory protection | : | None necessary during normal and routine operations. See Sections 5 & 6. |
| Thermal hazard protection | : | None necessary during normal and routine operations. |
| Environmental exposure controls | : | Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment. |
| Other information | : | Wear safety shoes while handling containers. 29 CFR 1910.136: Foot Protection. |

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Appearance | : | Clear, colorless liquid. |
| Color | : | Colorless |
| Odor | : | gasoline-like |
| Odor 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 (butyl acetate=1) | : | No data available |
| Flammability (solid, gas) | : | See Section 2.1 and 2.2 |
| Explosion limits | : | No data available |
| Explosive properties | : | Without adequate ventilation formation of explosive mixtures may be possible. |
| Oxidizing properties | : | None. |
| Vapor pressure | : | No data available |
| Relative density | : | No data available |
| Relative vapor density at 20 °C | : | No data available |
| Molecular mass | : | No Data Available |
| Relative gas density | : | Heavier than air |
| Solubility | : | No data available |

| | | |
|---|---|---|
| Log Pow | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |

### 9.2. Other information

Additional information : Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None known.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Can form explosive mixture with air.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Oxidizing materials. Air.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| **Isoprene (78-79-5)** | |
|---|---|
| LD50 dermal rat | > 1 ml/kg |
| LC50 inhalation rat (mg/l) | 180 mg/l/4h |
| LC50 inhalation rat (ppm) | 64597.09 ppm/4h |
| ATE US (gases) | 64597.090 ppmV/4h |
| ATE US (vapors) | 180.000 mg/l/4h |
| ATE US (dust, mist) | 180.000 mg/l/4h |

| **n-Hexane (110-54-3)** | |
|---|---|
| LD50 dermal rabbit | 3000 mg/kg |
| LC50 inhalation rat (ppm) | 48000 ppm/4h |
| ATE US (dermal) | 3000.000 mg/kg body weight |
| ATE US (gases) | 48000.000 ppmV/4h |

| **Isobutylene (115-11-7)** | |
|---|---|
| LC50 inhalation rat (ppm) | 239620.46 ppm/4h |
| ATE US (gases) | 239620.460 ppmV/4h |

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| **Isoprene (78-79-5)** | |
|---|---|
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicology Program (NTP) Status | 1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen |

| Isoprene (78-79-5) | |
|---|---|
| In OSHA Hazard Communication Carcinogen list | Yes |

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : May cause damage to organs (central nervous system) through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : May displace oxygen and cause rapid suffocation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

Symptoms/injuries upon intravenous administration : Not known.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs (Central nervous system.) through prolonged or repeated exposure.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Isoprene (78-79-5) | |
|---|---|
| LC50 fish 1 | 32.5 - 50.15 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| EC50 Daphnia 1 | 140 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 other aquatic organisms 1 | > 1000 mg/l (Exposure time: 96 h - Species: Scenedesmus quadricauda) |
| LC50 fish 2 | 58.75 - 95.32 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |

| n-Hexane (110-54-3) | |
|---|---|
| LC50 fish 1 | 2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

| Isoprene (78-79-5) | |
|---|---|
| BCF fish 1 | (no bioaccumulation expected) |
| Log Pow | 3.2 - 4.5 (at 20 °C) |

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer : No known effects from this product.

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. Waste gas should be flared through a suitable burner with flash back arrestor. Do not discharge into areas where there is a risk of forming an explosive mixture with air.

Waste disposal recommendations : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

| | | |
|---|---|---|
| Transport document description | : | UN3501 Chemical under pressure, flammable, n.o.s., 2.1 |
| UN-No.(DOT) | : | UN3501 |
| Proper Shipping Name (DOT) | : | Chemical under pressure, flammable, n.o.s. |
| Transport hazard class(es) (DOT) | : | 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115 |
| Hazard labels (DOT) | : | 2.1 - Flammable gas |


| | | |
|---|---|---|
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : | 335 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : | 313;315 |
| DOT Symbols | : | G - Identifies PSN requiring a technical name |
| DOT Special Provisions (49 CFR 172.102) | : | T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of this subchapter. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : | None |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : | Forbidden |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : | 75 kg |
| DOT Vessel Stowage Location | : | D - The material must be stowed ‘‘on deck only’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded. |
| DOT Vessel Stowage Other | : | 40 - Stow ‘‘clear of living quarters’’ |
| Other information | : | No supplementary information available. |

### TDG

| | | |
|---|---|---|
| Transport document description | : | UN3501 Chemical Under Pressure, Flammable, N.O.S, 2.1 |
| UN-No. (TDG) | : | UN3501 |
| TDG Proper Shipping Name | : | Chemical Under Pressure, Flammable, N.O.S |
| TDG Primary Hazard Classes | : | 2.1 - Class 2.1 - Flammable Gas. |

### Transport by sea

| | | |
|---|---|---|
| UN-No. (IMDG) | : | 3501 |
| Proper Shipping Name (IMDG) | : | Chemical Under Pressure, Flammable, N.O.S |
| Class (IMDG) | : | 2 - Gases |

### Air transport

| | | |
|---|---|---|
| UN-No. (IATA) | : | 3501 |
| Proper Shipping Name (IATA) | : | Chemical Under Pressure, Flammable, N.O.S |
| Class (IATA) | : | 2.1 - Gases : Flammable |

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

| **Isoprene (78-79-5)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory<br>Subject to reporting requirements of United States SARA Section 313 | |
| SARA Section 313 - Emission Reporting | 0.1 % |

| n-Hexane (110-54-3) | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory<br>Subject to reporting requirements of United States SARA Section 313 | |
| SARA Section 313 - Emission Reporting | 1.0 % |

### 15.2. International regulations

#### CANADA

| Isoprene (78-79-5) |
|---|
| Listed on the Canadian DSL (Domestic Sustances List) |

| n-Hexane (110-54-3) | |
|---|---|
| Listed on the Canadian DSL (Domestic Sustances List) | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid<br>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

#### EU-Regulations

No additional information available

#### National regulations

| Isoprene (78-79-5) |
|---|
| Listed on the AICS (Australian Inventory of Chemical Substances)<br>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)<br>Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory<br>Listed on the Japanese ISHL (Industrial Safety and Health Law)<br>Listed on the Korean ECL (Existing Chemicals List)<br>Listed on NZIoC (New Zealand Inventory of Chemicals)<br>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)<br>Japanese Pollutant Release and Transfer Register Law (PRTR Law)<br>Listed on the Canadian IDL (Ingredient Disclosure List) |

| n-Hexane (110-54-3) |
|---|
| Listed on the AICS (Australian Inventory of Chemical Substances)<br>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)<br>Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory<br>Listed on the Korean ECL (Existing Chemicals List)<br>Listed on NZIoC (New Zealand Inventory of Chemicals)<br>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)<br>Japanese Pollutant Release and Transfer Register Law (PRTR Law)<br>Listed on the Canadian IDL (Ingredient Disclosure List) |

### 15.3. US State regulations

| Isoprene (78-79-5) | | | | |
|---|---|---|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| Yes | No | No | No | |

| Isoprene (78-79-5) |
|---|
| U.S. - Massachusetts - Right To Know List<br>U.S. - New Jersey - Right to Know Hazardous Substance List<br>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List<br>U.S. - Pennsylvania - RTK (Right to Know) List |

| n-Hexane (110-54-3) |
|---|
| U.S. - Massachusetts - Right To Know List<br>U.S. - New Jersey - Right to Know Hazardous Substance List<br>U.S. - Pennsylvania - RTK (Right to Know) List |

## SECTION 16: Other information

Indication of changes : Revised safety data sheet in accordance with OSHA final rule on GHS implementation promulgated March 26, 2012.

Other information : This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

Full text of H-phrases:

| | |
|---|---|
| Aquatic Chronic 2 | Hazardous to the aquatic environment - Chronic Hazard Category 2 |
| Asp. Tox. 1 | Aspiration hazard Category 1 |
| Carc. 1B | Carcinogenicity Category 1B |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Flam. Gas 1 | Flammable gases Category 1 |
| Flam. Liq. 1 | Flammable liquids Category 1 |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| Liquefied gas | Gases under pressure Liquefied gas |
| Muta. 2 | Germ cell mutagenicity Category 2 |
| Repr. 2 | Reproductive toxicity Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT RE 2 | Specific target organ toxicity (repeated exposure) Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H220 | Extremely flammable gas |
| H224 | Extremely flammable liquid and vapor |
| H225 | Highly flammable liquid and vapor |
| H280 | Contains gas under pressure; may explode if heated |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |
| H341 | Suspected of causing genetic defects |
| H350 | May cause cancer |
| H361 | Suspected of damaging fertility or the unborn child |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H411 | Toxic to aquatic life with long lasting effects |

SDS US (GHS HazCom 2012)

*This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Air Liquide America Corporation's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.*