

## Safety Data Sheet

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

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : Isobutylene (0.00001% - 79.80%), Isoprene (0.10% - 79.89999%), Methyl Chloride (0.10% -

20.00%) in n-Hexane

Product code : SG-2004-01837

## 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 Contains gas under pressure; may explode if heated H280 -Skin Irrit. 2 H315 -Causes skin irritation Eve Irrit. 2A H319 -Causes serious eye irritation Muta. 2 H341 -Suspected of causing genetic defects Carc. 1B H350 -May cause cancer

Repr. 2 H361 - Suspected of damaging fertility or the unborn child STOT SE 3 H336 - May cause drowsiness or dizziness

NAY cause drowsiness of dizzliness

STOT RE 2 H373 - May cause damage to organs (central nervous system,

liver, kidneys, lung) 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)



GHS04





GHS02 : Danger

Signal word (GHS-US) : Danger Hazard statements (GHS-US) : H220 - Extre

: 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 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 (central nervous system, liver, kidneys, lung) through

prolonged or repeated exposure

OSHA-H01 - May displace oxygen and cause rapid suffocation

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Precautionary statements (GHS-US)

CGA-HG04 - May form explosive mixtures with air

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	20 - 99.79999	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Isoprene	(CAS No) 78-79-5	0.1 - 79.89999	Flam. Liq. 1, H224 Muta. 2, H341 Carc. 1B, H350 Aquatic Chronic 2, H411
Isobutylene	(CAS No) 115-11-7	0.00001 - 79.8	Flam. Gas 1, H220 Liquefied gas, H280
Chloromethane (R40)	(CAS No) 74-87-3	0.1 - 20	Flam. Gas 1, H220 Liquefied gas, H280 Acute Tox. 4 (Inhalation:gas), H332 Carc. 2, H351 STOT RE 2, H373

Full text of H-phrases: see section 16

## **SECTION 4: First aid measures**

First-aid measures after inhalation : Remove victim to fresh air a

- : 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.

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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 : May cau

: May cause cancer. Suspected of causing genetic defects. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs (liver, lung, kidneys,

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

inglities. Do not enter the 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

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.

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## 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

Chloromethane (R40) (74-87-3)		
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (ppm)	100 ppm
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm

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 : No data available

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Odor threshold : No data available No data available pН 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 : No data available Auto-ignition temperature 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

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ATE US (vapors)	180.000 mg/l/4h
	180.000 Highlian
ATE US (dust, mist)	180.000 mg/l/4h
Chloromethane (R40) (74-87-3)	
LD50 oral rat	1800 mg/kg
LC50 inhalation rat (mg/l)	5300 mg/m³ (Exposure time: 4 h)
LC50 inhalation rat (ppm)	4150 ppm/4h
ATE US (oral)	1800.000 mg/kg body weight
ATE US (gases)	4150.000 ppmV/4h
ATE US (vapors)	5.300 mg/l/4h
ATE US (dust, mist)	5.300 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	: Suspected of causing genetic defects.
Carcinogenicity	: May cause cancer.
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
In OSHA Hazard Communication Carcinogen	Yes
list	
Chloromethane (R40) (74-87-3)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
recome target organ toxicity (single exposure)	. May badde drowniness of dizziness.
Specific target organ toxicity (repeated	: May cause damage to organs (central nervous system, liver, kidneys, lung) through prolonged
exposure)	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	: Not known.
administration	
Chronic symptoms	: May cause cancer. Suspected of causing genetic defects. Suspected of damaging fertility.

## **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])

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Isoprene (78-79-5)		
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])	
Chloromethane (R40) (74-87-3)		
LC50 fish 1	550 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [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

Chloromethane (R40) (74-87-3)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist.

## 12.3. Bioaccumulative potential

Isoprene (78-79-5)		
BCF fish 1	(no bioaccumulation expected)	
Log Pow	3.2 - 4.5 (at 20 °C)	
Chloromethane (R40) (74-87-3)		
Log Pow	0.91	
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.	

## 12.4. Mobility in soil

Chloromethane (R40) (74-87-3)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

## 12.5. Other adverse effects

Effect on ozone layer : No known effects from 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

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DOT Packaging Bulk (49 CFR 173.xxx) : 313;315

**DOT Symbols** : G - Identifies PSN requiring a technical name

: T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the DOT Special Provisions (49 CFR 172.102)

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)

DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 75 kg

CFR 175.75)

**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

: Chemical Under Pressure, Flammable, N.O.S TDG Proper Shipping Name

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 Subject to reporting requirements of United States SARA Section 313			
SARA Section 313 - Emission Reporting	0.1 %		
Chloromethane (R40) (74-87-3)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313			
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.		
SARA Section 313 - Emission Reporting	1.0 %		
Harris (440 F4 0)			

#### n-Hexane (110-54-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory 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)

## Chloromethane (R40) (74-87-3)

Listed on the Canadian DSL (Domestic Sustances List)

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

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

## Chloromethane (R40) (74-87-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

## n-Hexane (110-54-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

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		
Chloromethane (R40) (74-87-3)					
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)	
No	Yes	No	Yes		

## Isoprene (78-79-5)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

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## Chloromethane (R40) (74-87-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

#### n-Hexane (110-54-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- 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:

Acute Tox. 4 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
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
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing 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)

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