



# Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline

## Safety Data Sheet

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

Date of issue: 11/20/2014

Supersedes: 11/06/2014

Version: 1.1

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline  
Product code : SG-2004-01421

#### 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 America Specialty Gases  
6141 Easton Rd  
Plumsteadville, PA 18949 - USA  
T 1.800.217.2688  
[www.airliquide.com](http://www.airliquide.com)

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazards identification

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

##### Classification (GHS-US)

Flam. Gas 1	H220
Compressed gas	H280
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Inhalation:gas)	H332
Muta. 1B	H340
Carc. 1B	H350
STOT SE 1	H370
Asp. Tox. 1	H304

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H220 - Extremely flammable gas  
H280 - Contains gas under pressure; may explode if heated  
H302+H332 - Harmful if swallowed or if inhaled  
H304 - May be fatal if swallowed and enters airways  
H340 - May cause genetic defects (Inhalation) Dermal  
H350 - May cause cancer (Dermal, Inhalation)  
H370 - Causes damage to organs (CNS, Impaired Vision, Skin, Respiratory and Digestive Systems) (Dermal, Inhalation, oral)  
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  
P271 - Use only outdoors or in a well-ventilated area  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking  
P233 - Keep container tightly closed  
P243 - Take precautionary measures against static discharge  
P240 - Ground/bond container and receiving equipment

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P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P261 - Avoid breathing fume, gas, mist, spray, vapors  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
CGA-PG05 - Use a back flow preventive device in the piping  
CGA-PG21 - Open valve slowly  
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  
P381 - Eliminate all ignition sources if safe to do so  
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely  
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)  
P403 - Store in a well-ventilated place

### 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	%	Classification (GHS-US)
GASOLINE	(CAS No) 8006-61-9	70.0002 - 98.9998	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
Methyl alcohol	(CAS No) 67-56-1	1 - 10	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
Ethyl alcohol	(CAS No) 64-17-5	0.0001 - 9.9999	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
TERT-BUTYL METHYL ETHER	(CAS No) 1634-04-4	0.0001 - 9.9999	Flam. Liq. 2, H225 Skin Irrit. 2, H315

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 contaminated clothing. Drench affected area with water for at least 15 minutes.

First-aid measures after eye contact : Adverse effects not expected from this product.

First-aid measures after ingestion : Rinse mouth. Immediately consult a doctor/medical service.

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

Symptoms/injuries : Symptoms similar to those listed under inhalation, skin contact and ingestion.

Symptoms/injuries after inhalation : Harmful if inhaled. May displace oxygen and cause rapid suffocation. Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.

Symptoms/injuries after skin contact : Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.

Symptoms/injuries after eye contact : Adverse effects not expected from this product.

Symptoms/injuries after ingestion : Harmful if swallowed. May be fatal if swallowed and enters airways. Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.

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Symptoms/injuries upon intravenous administration	: Not known.
Chronic symptoms	: May cause genetic defects. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause cancer.

### 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	: Dry chemical, carbon dioxide, water spray, foam, fog.
Unsuitable extinguishing media	: Do not use water jet to extinguish.

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

Fire hazard	: Flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
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.
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#### 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. Handle empty containers with care because residual vapors are flammable. Use equipment rated for cylinder pressure. In use, may form flammable vapor-air mixture. Close valve after each use and when empty.
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Hygiene measures	: Do not eat, drink or smoke when using this product.

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### 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.
Incompatible products	: None known.
Incompatible materials	: Oxidizing materials. Air.

### 7.3. Specific end use(s)

Test gas/Calibration gas.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline		
ACGIH	Not applicable	
OSHA	Not applicable	
Ethyl alcohol (64-17-5)		
ACGIH	ACGIH STEL (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Methyl alcohol (67-56-1)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
TERT-BUTYL METHYL ETHER (1634-04-4)		
ACGIH	Not applicable	
OSHA	Not applicable	
GASOLINE (8006-61-9)		
ACGIH	Not applicable	
OSHA	Not applicable	

### 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. 29CFR 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	: Amber liquid.
Molecular mass	: No data available

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Color	: amber
Odor	: gasoline-like
Odor threshold	: No data available
pH	: Not applicable.
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable
Vapor pressure	: Not applicable.
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Relative gas density	: Heavier than air
Solubility	: No data available.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: Not applicable.
Viscosity, dynamic	: Not applicable.
Explosive properties	: Without adequate ventilation formation of explosive mixtures may be possible.
Oxidizing properties	: None.
Explosive limits	: 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.
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## 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

Air. Oxidizing materials.

### 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 : Oral: Harmful if swallowed. Inhalation:gas: Harmful if inhaled.

Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline	
ATE US (oral)	500.000 mg/kg body weight
ATE US (gases)	4500.000 ppmV/4h

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Ethyl alcohol (64-17-5)	
LC50 inhalation rat (mg/l)	124.7 mg/l/4h
LC50 inhalation rat (ppm)	66180 ppm/4h
ATE US (vapors)	59.950 mg/l/4h
ATE US (dust, mist)	124.700 mg/l/4h
Methyl alcohol (67-56-1)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 inhalation rat (mg/l)	83.2 mg/l/4h
LC50 inhalation rat (ppm)	64000 ppm/4h
ATE US (oral)	100.000 mg/kg body weight
ATE US (dermal)	300.000 mg/kg body weight
ATE US (gases)	700.000 ppmV/4h
ATE US (vapors)	3.000 mg/l/4h
ATE US (dust, mist)	0.500 mg/l/4h
TERT-BUTYL METHYL ETHER (1634-04-4)	
LD50 oral rat	2963 mg/kg
LD50 dermal rabbit	10000 mg/kg
LC50 inhalation rat (ppm)	23576 ppm/4h
ATE US (oral)	2963.000 mg/kg body weight
ATE US (dermal)	10000.000 mg/kg body weight
ATE US (gases)	23576.000 ppmV/4h
GASOLINE (8006-61-9)	
LC50 inhalation rat (ppm)	20932 ppm/4h
Skin corrosion/irritation	: Not classified pH: Not applicable.
Serious eye damage/irritation	: Not classified pH: Not applicable.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: May cause genetic defects (Inhalation).
Carcinogenicity	: May cause cancer (Dermal, Inhalation).
Ethyl alcohol (64-17-5)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Causes damage to organs (Dermal, Inhalation, oral).
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Harmful if inhaled. May displace oxygen and cause rapid suffocation. Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.
Symptoms/injuries after skin contact	: Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.
Symptoms/injuries after eye contact	: Adverse effects not expected from this product.
Symptoms/injuries after ingestion	: Harmful if swallowed. May be fatal if swallowed and enters airways. Causes damage to organs (CNS,Vision,Skin,Respiratory System, Digestive System) by inhalation, ingestion and skin contact.
Symptoms/injuries upon intravenous administration	: Not known.
Chronic symptoms	: May cause genetic defects. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause cancer.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Classification criteria are not met.

Ethyl alcohol (64-17-5)	
LC50 fish 1	12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Methyl alcohol (67-56-1)	
LC50 fish 1	28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

#### 12.2. Persistence and degradability

Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline	
Persistence and degradability	No data available.

#### 12.3. Bioaccumulative potential

Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline	
Log Pow	No data available
Log Kow	No data available
Bioaccumulative potential	No data available.
Ethyl alcohol (64-17-5)	
Log Pow	-0.32
Methyl alcohol (67-56-1)	
BCF fish 1	< 10
Log Pow	-0.77

#### 12.4. Mobility in soil

Ethanol (0.0001% - 9.9999%), Methanol (1.00% - 10.0000%), Tert-butyl Methyl Ether (0.0001% - 9.9999%) in Gasoline	
Mobility in soil	No data available.

#### 12.5. Other adverse effects

Effect on ozone layer : None.

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 areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash back arrestor. 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 disposal recommendations : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at [www.cganet.com](http://www.cganet.com) for more guidance on suitable disposal methods.

### SECTION 14: Transport information

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.

Department of Transportation (DOT) Hazard Classes : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

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Hazard labels (DOT) : 2.1 - Flammable gas



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 Packaging Non Bulk (49 CFR 173.xxx) : 335

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

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"

### Additional information

Other information : No supplementary information available.

Special transport precautions : Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers:

- Ensure there is adequate ventilation.
- Ensure that containers are firmly secured.
- Ensure cylinder valve is closed and not leaking.
- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
- Ensure valve protection device (where provided) is correctly fitted.

### ADR

No additional information available

### Transport by sea

UN-No. (IMDG) : 3501

Proper Shipping Name (IMDG) : Chemical under pressure, flammable, n.o.s.

Class (IMDG) : 2.1 - Flammable 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

#### Bulk ethanol (64-17-5)

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

#### 99% METHANOL (67-56-1)

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

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting	1.0 %
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### 15.2. International regulations

#### CANADA



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Bulk ethanol (64-17-5)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects
99% METHANOL (67-56-1)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects 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

Bulk ethanol (64-17-5)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
99% METHANOL (67-56-1)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

#### 15.2.2. National regulations

Bulk ethanol (64-17-5)	
Listed on IARC (International Agency for Research on Cancer) 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) Listed on the Canadian IDL (Ingredient Disclosure List)	
99% METHANOL (67-56-1)	
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 Listed on the Canadian IDL (Ingredient Disclosure List)	

#### 15.3. US State regulations

Bulk ethanol (64-17-5)				
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	No significance risk level (NSRL)
Yes	Yes	No	No	
99% METHANOL (67-56-1)				
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	No significance risk level (NSRL)
No	Yes	No	No	

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### Bulk ethanol (64-17-5)

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

### 99% METHANOL (67-56-1)

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

## 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. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Compressed gas	Gases under pressure Compressed gas
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 2	Flammable liquids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H220	Extremely flammable gas
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H340	May cause genetic defects (Inhalation)
H350	May cause cancer
H370	Causes damage to organs

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.*