



## Material Safety Data Sheet Methanol and Methanol, 50% v/v

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Methanol and Methanol, 50% v/v

**Catalog Numbers:**

LC16800, LC16810, LC16830

**Synonyms:**

Methyl alcohol, wood alcohol

**Company Identification:**

LabChem Inc  
200 William Pitt Way  
Pittsburgh, PA 15238

**Company Phone Number:**

(412) 826-5230

**Emergency Phone Number:**

(800) 424-9300

**CHEMTREC Phone Number:**

(800) 424-9300 or  
011-703-527-3887

### Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
67-56-1	Methanol	50-100
7732-18-5	Water (for 50% v/v solution)	balance

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** *Clear, colorless solution*

**Danger!** Flammable liquid. Poison. May be fatal or cause blindness if swallowed or absorbed through the skin. Vapor harmful. Central nervous system depressant. Cannot be made nonpoisonous. May cause irritation to eyes, skin, and respiratory tract.

**Target Organs:** *Eyes, skin, respiratory and gastrointestinal tracts, central nervous system, optic nerve, liver, kidneys, blood*

#### Potential Health Effects

**Eye:**

Causes eye irritation. May cause permanent vision impairment or loss.

**Skin:**

May cause skin irritation. May be absorbed through the skin in harmful amounts.

**Ingestion:**



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May cause liver and kidney damage. Inhalation or ingestion causes narcotic intoxication, headache, cramps, severe pain, and blindness. Kidney and liver damage may occur with possible heart or respiratory failure to coma and death. Some symptoms may be delayed for days.

**Inhalation:**

May cause respiratory tract irritation. Symptoms of inhalation may be similar to those of ingestion.

**Chronic:**

May cause blurred or painful vision, blindness, defatting of skin, and liver and kidney damage. Experiments with laboratory animals have shown reproductive toxicity effects.

### Section 4 - First Aid Measures

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid at once. Do NOT allow victim to rub or keep eyes closed.

**Skin:**

Get medical aid at once. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid at once.

**Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

**Notes to Physician:**

Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors are heavier than air and may travel to a source of ignition and flashback. Cool containers with water spray. Vapor-air mixtures are explosive.

**Extinguishing Media:**

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**

Not applicable.

**Flash Point:**

12°C (for methanol, 100%); 30°C (for methanol, 50%)

**NFPA Rating:**

CAS# 67-56-1: Health- 1, Flammability- 3, Instability- 0.

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

**Explosion Limits:**

Lower: 6.7 Upper: 36



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### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Shut off ignition sources; avoid vapors. Use non-sparking tools and equipment. Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable container labeled for later disposal. Label reclaimed spill material as flammable. Isolate and ventilate the spill area. Keep out of sewers and drains.

### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Ground and bond containers when transferring material. Avoid breathing dust, vapor, mist, or gas. Keep away from flames and other sources of high temperatures that may cause material to form vapors or mists. Use explosion-proof equipment.

**Storage:**

Keep away from heat, sparks, and flame. Store tightly closed in a cool, dry, well-ventilated place.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Methanol	200 ppm TWA 250 ppm STEL	200 ppm TWA 250 ppm STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m <sup>3</sup> TWA
Water	none listed	none listed	none listed

**OSHA Vacated PELs:**

Methanol: 200 ppm TWA, 260 mg/m<sup>3</sup> TWA, 250 ppm STEL, 325 mg/m<sup>3</sup> STEL

**Personal Protective Equipment****Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:**

Wear appropriate gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**



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Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Alcohol-like
<b>pH:</b>	Not available
<b>Vapor Pressure:</b>	97 mm Hg @ 20°C
<b>Vapor Density:</b>	1.11 (Air = 1.0)
<b>Evaporation Rate:</b>	5.2 (Ether = 1.0)
<b>Viscosity:</b>	0.55 cP @ 20°C
<b>Boiling Point:</b>	65°C (148°F)
<b>Freezing/Melting Point:</b>	-98°C (-144°F)
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in water:</b>	Miscible
<b>Specific Gravity/Density:</b>	0.791
<b>Molecular Formula:</b>	CH <sub>3</sub> OH
<b>Molecular Weight:</b>	32.04

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Incompatible substances, heat, flames, sources of ignition.

**Incompatibilities with Other Materials:**

Strong oxidizers, strong acids, acid anhydrides, acid chlorides, strong bases, metals, peroxides.

**Hazardous Decomposition Products:**

Carbon monoxide, formaldehyde.

**Hazardous Polymerization:**

Has not been reported.

### Section 11 - Toxicological Information

**RTECS:**

CAS# 7732-18-5: ZC0110000.

CAS# 67-56-1: PC1400000.

**LD50/LC50:**

CAS# 7732-18-5:

Oral, rat: 99999 mg/kg

CAS# 67-56-1:

Inhalation, rat: LC50 = 64000 ppm/4H

Inhalation, rat: LC50 = 83.2 mg/L/4H

Oral, rat: LD50 = 5628 mg/kg

Skin, rabbit: LD50 = 15800 mg/kg.



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### **Carcinogenicity:**

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 67-56-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

### **Epidemiology:**

Irritating to eyes, skin, and respiratory tract.

### **Teratogenicity:**

Teratogenic effects have occurred in experimental animals.

### **Reproductive:**

Reproductive toxicity has occurred in experimental animals.

### **Mutagenicity:**

Mutagenic effects have occurred in experimental animals.

### **Neurotoxicity:**

No information found

## Section 12 - Ecological Information

**Ecotoxicity:** Freshwater fish: *Oncorhynchus mykiss*, LC50 = 13200 mg/L/96 h; *Pimephales promelas*, LC50 = 28100 mg/L/96 h

## Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

## Section 14 - Transport Information

### US DOT\*

	100%	50%
<b>Shipping Name:</b>	Methanol	Flammable liquid, n.o.s. (Methanol)
<b>Hazard Class:</b>	3	3
<b>UN Number:</b>	UN1230	UN1993
<b>Packing Group:</b>	PG II	PGIII

\* For international shipments, methanol has a subsidiary hazard class of 6.1.

## Section 15 - Regulatory Information

### US Federal

#### **TSCA:**

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 67-56-1 is listed on the TSCA Inventory.

#### **SARA Reportable Quantities (RQ):**

CAS# 67-56-1: final RQ = 5000 pounds (2270 kg)

#### **CERCLA/SARA Section 313:**

This material contains Methanol (CAS# 67-56-1, 50-100%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.



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### OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

### US State

#### State Right to Know:

Methyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

#### California Regulations:

WARNING: This product contains Methanol, a chemical known to the state of California to cause birth defects or other reproductive harm.

### European/International Regulations

#### Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 67-56-1 is listed on Canada's DSL List.

#### Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List.

## Section 16 - Other Information

MSDS Creation Date: May 5, 1998

Revision Date: May 2, 2012

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