

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 03/04/2019

Reviewed on 03/04/2019

1 Identification

- **Product Identifier**
- **Trade Name: Methanol (Methyl alcohol)**
- **CAS Number:**
67-56-1
- **EC number:**
200-659-6
- **Index number:**
603-001-00-X
- **Relevant identified uses of the substance or mixture and uses advised against:** None
- **Product Description:** Methanol
- **Application of the substance / the mixture:** Industry Specific Application
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
YCI Methanol One, LLC
5181 Wildcat Street
St. James, LA 70086
P: 225-412-9068

- Manufacturing Address:
6586 LA-3127
St. James, LA 70086

- P.O. Box 510
Vacherie, LA 70090
- **Emergency telephone number:**
PERS (acct: 11095)
800-633-8253 (Domestic/Canada)
801-629-0667 (International)

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.
Acute Tox. 3 H331 Toxic if inhaled.



Health hazard

STOT SE 1 H370 Causes damage to organs.

- **Label elements:**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).

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Trade Name: Methanol (Methyl alcohol)

Hazard pictograms:



GHS02 GHS06 GHS08

Signal word: Danger

Hazard-determining components of labeling:

Methanol

Hazard statements:

- H225 Highly flammable liquid and vapor.
- H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
- H370 Causes damage to organs.

Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 If swallowed: Immediately call a poison center/doctor.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P330 Rinse mouth.
- P302+P352 If on skin: Wash with plenty of water.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a poison center/doctor if you feel unwell.
- P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.

Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

NFPA ratings (scale 0 - 4)



Health = 1
Fire = 3
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = *1
FIRE	3	Fire = 3
REACTIVITY	0	Physical Hazard = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization: Substance**
- **CAS No. Description**
67-56-1 Methanol 100%
- **Identification number(s)**
- **EC number:** 200-659-6
- **Index number:** 603-001-00-X
- **Additonal information:** Methyl alcohol

4 First-Aid Measures

- **Description of first aid measures**
- **After inhalation:**
Remove to fresh air.
In case of unconsciousness place patient stably in the side position for transportation.
- **After skin contact:**
Remove contaminated clothing and wash before reuse.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.
If eye irritation occurs, consult a doctor.
Rinse opened eye for several minutes under running water.
- **After swallowing:**
Do not induce vomiting without medical advice.
Seek medical attention.
- **Information for doctor**
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Most important symptoms and effects, both acute and delayed:**
May cause respiratory irritation. Adverse symptoms may include the following: respiratory tract irritation coughing
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:**
Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

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· **Advice for firefighters**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

· **Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.
Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources.
No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

· **Environmental precautions:** Do not allow to enter sewers/surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.

· **Reference to other sections:**

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· PAC-1:	530 ppm
· PAC-2:	2,100 ppm
· PAC-3:	7200* ppm

7 Handling and Storage

· **Handling**

· **Precautions for safe handling:**

Put on appropriate personal protective equipment (see Section 8).
Do not ingest.
Avoid contact with eyes, skin and clothing.
Avoid breathing vapor or mist.
Use only with adequate ventilation.
Wear appropriate respirator when ventilation is inadequate.
Do not enter storage areas and confined spaces unless adequately ventilated.
Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
Store and use away from heat, sparks, open flame or any other ignition source.
Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
Use only non-sparking tools.
Take precautionary measures against electrostatic discharges.
Empty containers retain product residue and can be hazardous.
Do not reuse container.

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- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

· **Control parameters:**

· Components with occupational exposure limits:	
67-56-1 Methanol	
PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

· **Ingredients with biological limit values:**

67-56-1 Methanol	
BEI	15 mg/L urine end of shift Methanol (background, nonspecific)

- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Have self-contained breathing apparatus, positive pressure, MSHA/NIOSH (approved or equivalent) available in case of spillage or equipment failure.
Use only with adequate ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves:**
Chemical resistant
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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- **Penetration time of glove material:** Not applicable.
- **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** Liquid
- **Color:** Clear
- **Odour:** Alcohol-like
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.

· **Change in condition**

- **Melting point/Melting range:** -98 °C (-144.4 °F) (-144° F)
- **Boiling point/Boiling range:** 64.7 °C (148.5 °F) (148.46 °F)

- **Flash point:** 11 °C (51.8 °F) (51.8 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 464 °C (867.2 °F) (867.2 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** 385C

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

- **Lower:** 5.5 Vol %
- **Upper:** 44 Vol %

- **Vapor pressure @ 20 °C (68 °F):** 16.9 kPa

· **Density:**

- **Relative density @ 20 °C (68 °F):** 0.79 g/cm³ (6.5926 lbs/gal) (6.59 lbs/gal)
- **Vapor density @ 20 °C (68 °F):** 1.1 g/cm³ (9.1795 lbs/gal)
- **Evaporation rate:** Not determined.

· **Solubility in / Miscibility with:**

- **Water:** Fully miscible.

- **Partition coefficient (n-octanol/water):** -0.77 log POW

· **Viscosity:**

- **Dynamic:** Not determined.
- **Kinematic:** Not determined.
- **Organic solvents:** 100.0 %
- **VOC content:** 100.00 %
- **Solids content:** 0.0 %

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- **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:**
No further relevant information available.
The product is stable under normal conditions.
No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Heat, flame and ignition sources.
- **Incompatible materials:** Strong oxidizers, strong acids, halogen gases, Buna-N and nitrile.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

67-56-1 Methanol

Oral	LD50	1,187 mg/kg (Rat)
Dermal	LD50	17,100 mg/kg (Rabbit)
Inhalative	LC50/4 h	128.2 mg/l (Rat)
	LC50/96 hours	15,400 mg/l (Trout)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**

· **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

Substance is not listed.

· **NTP (National Toxicology Program):**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

Substance is not listed.

12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

67-56-1 Methanol

EC50	22,000 mg/l (Green algae)
	10,000 mg/l (Daphnia)

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.

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Trade Name: Methanol (Methyl alcohol)

- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.
- **Waste disposal key:** U154
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

- **UN-Number:**
- **DOT, ADR/ADN, IMDG, IATA** UN1230
- **UN proper shipping name:**
- **DOT** Methanol
- **ADR/ADN** UN1230 Methanol
- **IMDG, IATA** METHANOL
- **Transport hazard class(es):**

· **DOT**



- **Class:** 3 Flammable liquids
- **Label:** 3, 6.1

· **ADR/ADN**



- **Class:** 3 (FT1) Flammable liquids
- **Label:** 3+6.1

· **IMDG**



- **Class:** 3 Flammable liquids

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Trade Name: Methanol (Methyl alcohol)

· **Label:** 3/6.1

· **IATA**



· **Class:** 3 Flammable liquids
 · **Label:** 3 (6.1)
 · **Packing group:**
 · **DOT, ADR/ADN, IMDG, IATA** II
 · **Environmental hazards:** Not applicable.
 · **Special precautions for user:** Warning: Flammable liquids
 · **Danger code (Kemler):** 336
 · **EMS Number:** F-E,S-D
 · **Stowage Category** B
 · **Stowage Code** SW2 Clear of living quarters.
 · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
 · **Transport/Additional information:**
 · **DOT**
 · **Quantity limitations:** On passenger aircraft/rail: 1 L
 On cargo aircraft only: 60 L
 · **Hazardous substance:** 5000 lbs, 2270 kg
 · **Remarks:** ERG number: 131

· **ADR/ADN**
 · **Excepted quantities (EQ):** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**
 · **Limited quantities (LQ):** 1L
 · **Excepted quantities (EQ):** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml
 · **UN "Model Regulation":** UN 1230 METHANOL, 3 (6.1), II

***15 Regulatory Information**

· **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
 · **SARA (Superfund Amendments and Reauthorization):**

· Section 355 (extremely hazardous substances): Substance is not listed.
· Section 313 (Specific toxic chemical listings): Substance is listed.
· TSCA (Toxic Substances Control Act): Substance is listed.
· California Proposition 65:
· Chemicals known to cause cancer: Substance is not listed.

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· Chemicals known to cause reproductive toxicity for females:
Substance is not listed.
· Chemicals known to cause reproductive toxicity for males:
Substance is not listed.
· Chemicals known to cause developmental toxicity:
Substance is listed.
· New Jersey Right-to-Know List:
Substance is listed.
· New Jersey Special Hazardous Substance List:
TE, F3
· Pennsylvania Right-to-Know List:
Substance is not listed.
· Pennsylvania Special Hazardous Substance List:
Substance is not listed.
· Carcinogenic categories:
· EPA (Environmental Protection Agency):
Substance is not listed.
· TLV (Threshold Limit Value established by ACGIH):
Substance is not listed.
· NIOSH-Ca (National Institute for Occupational Safety and Health):
Substance is not listed.

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**



GHS02 GHS06 GHS08

· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Methanol

· **Hazard statements:**

- H225 Highly flammable liquid and vapor.
- H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
- H370 Causes damage to organs.

· **Precautionary statements:**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.

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P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P321	Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P330	Rinse mouth.
P302+P352	If on skin: Wash with plenty of water.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a poison center/doctor if you feel unwell.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use for extinction: CO ₂ , powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

Non-Regulated Material

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 03/04/2019 / 4

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

· *** Data compared to the previous version altered.**

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