

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Methanol 99%
CAS number	67-56-1
Synonyms	Methyl alcohol, Wood alcohol, Carbinol, Wood spirit, Wood naphtha, Methylo, Methyl hydroxide, Pyroxylic spirit

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

Identified uses	Use in accordance with manufacturer's recommendations.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC


SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2)
Acute toxicity, oral (Category 3)
Acute toxicity, dermal (Category 3)
Acute toxicity, inhalation (Category 3)
Specific target organ toxicity, single exposure (inhalation) (Category 1)
Central nervous system, optic nerve

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Highly flammable liquid and vapor. Toxic if swallowed Toxic in contact with skin. Toxic if inhaled. Causes damage to organs by inhalation
Precautionary statements	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing. Wear protective gloves/eye protection/face protection.
Response	If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None known.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
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Methanol	Methyl alcohol, Wood alcohol, Carbinol, Wood spirit, Wood naphtha, Methylol, Methyl hydroxide, Pyroxylic spirit	67-56-1	100%
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SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

- If inhaled** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician.
- In case of skin contact** Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
- In case of eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- If swallowed** Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

4.2 Most important symptoms and effects, both acute and delayed

Narcosis. Headache. Dizziness. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Direct contact with eyes may cause temporary irritation. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls

4.3 Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Provide standard methanol ingestion treatment. To prepare the antidote, make a solution using 100 mL of 100-proof ethyl alcohol (grain alcohol) in 2000 mL of water and give 1.5 mL/kg of body weight, or 100 mL for an average adult. Following this, at 2 hour intervals for 4 days, give the antidote (0.5-1.0 mL/kg of body weight, orally or intravenously) to reduce the metabolism of the methanol and to allow time for its excretion. Blood ethanol levels should be 1.0-1.5 mg/mL.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Specific hazards arising from the substance or mixture

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides.

5.3 Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.

5.4 Further information

Flash Point 51.8 °F (11.0 °C) Closed Cup

Autoignition Temperature 867.2 °F (464 °C)

Explosion limits

Upper 36%

Lower 6%

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

HMIS

Health	Flammability	Instability	Physical hazards
4	3	-	0

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink, or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Hygiene measures

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

Incompatibilities

Strong oxidizing agents

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value	
Methanol	PEL	260 mg/m ³	200 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value	
Methanol	STEL	250 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Methanol	STEL	325 mg/m ³	250 ppm
	TWA	260 mg/m ³	200 ppm

8.2 Exposure controls

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Personal protective equipment

Eye/face protection

Wear appropriate chemical resistant gloves. Nitrile, butyl rubber or neoprene gloves are recommended. Other suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Skin protection

Wear appropriate chemical resistant clothing. Use of an impervious apron is

Body Protection

Wear appropriate clothing to minimize skin exposure.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator with organic vapor cartridge and full facepiece.

Control of environmental exposure

Do not allow to wash into drains. Prevent from being released into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	alcohol-like
Odor Threshold	Not available
pH	No information available
Melting Point/Range	-144.4 °F (-98 °C)
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	36%
Lower	6%
Vapor Pressure	130.3 hPa (68 °F (20 °C))
Vapor Density	1.1
Density	0.791 g/ml (77 °F (25 °C))
Solubility	Completely miscible
Partition coefficient; n-octanol/water	Not available
Autoignition Temp	867.2 °F (464 °C)
Decomposition Temp	Not available
Viscosity	Not available
Molecular Formula	C H4 O
Molecular Weight	32.04 g/mol
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

9.2 Other safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Not a respiratory sensitizer.

Germ cell mutagenicity

No data available to indicate product or any components present at a greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Methanol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Causes damage to organs (central nervous system, optic nerve) by inhalation.

Specific target organ toxicity - repeated exposure

Not classified.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Chronic effects

Prolonged inhalation may be harmful.

11.2 Additional Information

The product contains volatile organic compounds which have a photochemical ozone creation potential.

SECTION 12: Ecological information

12.1 Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2 Persistence and degradability

This product is readily biodegradable.

12.3 Bio accumulative potential

This product is not expected to bio

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Dispose of contents in accordance with local/regional/national/international regulations.

Waste from residues/unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

DOT (US)

UN-no	UN1230
UN proper shipping name	Methanol (Methanol RQ: 5000)
Transport hazard classes	
Class	3
Subsidiary risk	None
Label	3
Packing group	II
Marine pollutant	No
Special provisions	IB2, T7, TP2
Packaging exceptions	150
Packaging non-bulk	202
Packaging bulk	242

IMDG

UN-no	UN1230
UN proper shipping name	Methanol (Methanol RQ: 5000)
Transport hazard classes	
Class	3
Subsidiary risk	None
Label	3
Packing group	II
Marine pollutant	No
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established

IATA

UN-no	UN1230
UN proper shipping name	Methanol (Methanol RQ: 5000)
Transport hazard classes	
Class	3
Subsidiary risk	None
Label	3
Packing group	II
Environmental hazards	No
ERG Code	3P
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)
Methanol

SARA 304 Emergency release notification
Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
Flammable. Acute toxicity. Specific target organ toxicity.

SARA 313 (TRI reporting)
Listed

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Listed

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated

Safe Drinking Water Act
Contaminate candidate list

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Not listed

US state regulations

US. Massachusetts RTK - Substance List
Listed

US. New Jersey Worker and Community Right-to-Know Act
Listed

US. Pennsylvania Worker and Community Right-to-Know Law
Listed

California Proposition 65
Listed

SECTION 16: Other information

Issue date: 11/27/23

Revision 1: 11/27/2023

Revision 2: 07/05/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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