



## SAFETY DATA SHEET: METHANOL

### Section 1: IDENTIFICATION

**Product Name:** METHANOL

**Common Names or Synonyms:** None.

**Recommended Use:** ALL PROPER AND LEGAL PURPOSES

**Restrictions on Use:** None known.

**Company:** **ChemFast, LLC**  
11 Jenna Drive Unit #1  
Gorham, ME 04038  
800-287-2225  
[info@chemfast.com](mailto:info@chemfast.com)

**Emergency Phone:** 1-800-424-9300  
CHEMTREC 24-Hour Emergency Service

### Section 2: HAZARD(S) IDENTIFICATION

**Physical Hazards:** Flammable liquids Category 2

**Health Hazards:** Serious eye damage/eye irritation Category 2A  
Reproductive toxicity Category 1  
Specific target organ toxicity, single exposure Category 1  
Specific target organ toxicity, repeated exposure Category 1

**Environmentals:** Not classified

**OSHA Hazards:** Not classified.

**Signal Word:** Danger

**Hazard Statement(s):** H225 - Highly flammable liquid and vapor.  
H319 - Causes serious eye irritation.  
H360 - May damage fertility or the unborn child.  
H370 - Causes damage to organs.  
H372 - Causes damage to organs through prolonged or repeated exposure.

**Pictograms:**



<b>Precautionary Statement(s):</b>	<p>P201 - Obtain special instructions before use.</p> <p>P202 - Do not handle until all safety precautions have been read and understood.</p> <p>P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.</p> <p>P233 - Keep container tightly closed.</p> <p>P240 - Ground/bond container and receiving equipment.</p> <p>P241 - Use explosion-proof electrical/ventilating/lighting equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P260 - Do not breathe mist or vapor.</p> <p>P264 - Wash ... thoroughly after handling.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p> <p>P281 - Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P303 + P361 + P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305 + P351 + P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P307 + P311 - If exposed: Call a poison center/doctor.</p> <p>P308 + P313 - If exposed or concerned: Get medical advice/attention.</p> <p>P337 + P313 - If eye irritation persists: Get medical advice/attention.</p> <p>P370 + P378 - In case of fire: Use appropriate media to extinguish.</p> <p>P403 + P235 - Store in a well-ventilated place. Keep cool.</p> <p>P405 - Store locked up.</p> <p>P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
<b>Hazards Not Otherwise Classified (HNOC):</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
<b>Other Information:</b>	None.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Common name/synonyms	CAS number	% Range
METHANOL		67-56-1	100

*\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.*

### Section 4: FIRST-AID MEASURES

<b>Inhalation:</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin Contact:</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye Contact:</b>	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.

<b>Ingestion:</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most Important Symptoms or Effects, Acute and Delayed:</b>	Headache. Dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.
<b>Indication of Immediate Medical Attention and Special Treatment, if Necessary:</b>	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 under observation. Symptoms may be delayed.
<b>General information:</b>	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## Section 5: FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Water fog. Alcohol resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable Extinguishing Media:</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific Hazards Arising from the Chemical:</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<b>Special Protective Equipment and Precautions for Firefighters:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions:</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods:</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards:</b>	Highly flammable liquid and vapor.

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions,</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or
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**Protective Equipment and  
Emergency Procedures:**

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. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Environmental Precautions:**

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

**Clean Up Procedures:**

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.

**Section 7: HANDLING AND STORAGE****Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Should be handled in closed systems, if possible. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static

Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

**Conditions for Safe Storage,  
Including Any Incompatibilities:**

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Store in a cool, dry place out of direct sunlight. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Occupational exposure limits**

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

Material	Type	Value
METHANOL (CAS 67-56-1)	PEL	260 mg/m3 200 ppm

**US. ACGIH Threshold Limit Values**

Material	Type	Value
METHANOL (CAS 67-56-1)	STEL TWA	250 ppm 200 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Material	Type	Value
METHANOL (CAS 67-56-1)	STEL TWA	325 mg/m3 250 ppm 260 mg/m3 200 ppm

**Biological limit values**

**ACGIH Biological Exposure Indices**

Material	Value	Determinant	Specimen	Sampling Time
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

**Appropriate Engineering  
Controls:**

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) 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. Eye wash fountain and emergency showers are recommended.

**Individual Protection Measures, such as Personal Protective Equipment:**

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product

must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

<b>Eye/face Protection:</b>	Chemical respirator with organic vapor cartridge and full face piece.
<b>Skin Protection:</b>	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear suitable protective clothing. Use of an impervious apron is recommended.
<b>Respiratory Protection:</b>	Chemical respirator with organic vapor cartridge and full face piece.
<b>Thermal Hazards:</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General Hygiene Considerations:</b>	Observe any medical surveillance requirements. When using do not smoke. 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.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

<b>Physical State</b>	Liquid
<b>Form</b>	Liquid
<b>Color</b>	Clear Colorless

**Odor:** Alcohol

**Odor Threshold:** Not Available

**pH:** Not Available

**Melting Point/Freezing Point:** -144 °F (-97.78 °C)

**Boiling Point and Range:** 148.46 °F (64.7 °C) 101.325 kPa

**Flash Point:** 52.0 °F (11.1 °C)

**Evaporation Rate:** Not Available

**Flammability (solid, gas):** Not Applicable

### Upper/Lower Flammability or Explosive Limits:

**Flammability Limit - Lower (%):** Not Available

**Flammability Limit - Upper (%):** Not Available

**Explosive Limit - Lower (%):** Not Available

**Explosive Limit - Upper (%):** Not Available

<b>Vapor Pressure:</b>	Not Available
<b>Vapor Density:</b>	Not Available
<b>Relative Density:</b>	Not Available
<b>Solubility(ies):</b>	
<b>Solubility (water)</b>	Miscible
<b>Partition Coefficient (n-octanol/water):</b>	-0.77
<b>Autoignition Temperature:</b>	464 °F (240 °C)
<b>Decomposition Temperature:</b>	Not Available
<b>Viscosity:</b>	Not Available
<b>Other information</b>	
<b>Density</b>	6.61 lbs/gal
<b>Dynamic Viscosity</b>	0.61 mPa.s
<b>Explosive Properties</b>	Not Explosive
<b>Flammability Class</b>	Flammable IB estimated
<b>Heat of combustion (NFPA 30B)</b>	19 kJ/g
<b>Molecular formula</b>	C-H4-O
<b>Molecular weight</b>	32.04 g/mol
<b>Oxidizing Properties</b>	Not Oxidizing
<b>Percent Volatile</b>	100%
<b>Specific Gravity</b>	0.79
<b>Surface Tension</b>	22.61 mN/m (68 °F (20 °C))
<b>VOC</b>	100% 100% EPA estimated

## Section 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of Hazardous Reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible Materials:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products are known.

## Section 11: TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure:

<b>Inhalation:</b>	May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation.
<b>Skin Contact:</b>	No adverse effects due to skin contact are expected.
<b>Eye Contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	Expected to be a low ingestion hazard.
<b>Symptoms Related to the Physical, Chemical and Toxicological Characteristics:</b>	Headache. Dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on Toxicological Effects:

<b>Acute Toxicity:</b>	Not available.
<b>Skin Corrosion/irritation:</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious Eye Damage/eye Irritation:</b>	Causes serious eye irritation.
<b>Respiratory or Skin Sensitization:</b>	
<b>Respiratory Sensitization:</b>	Not a respiratory sensitizer.
<b>Skin Sensitization:</b>	This product is not expected to cause skin sensitization.
<b>Germ Cell Mutagenicity:</b>	No data available to indicate product or any components present at greater than 0.1 % are mutagenic or genotoxic.
<b>Carcinogenicity:</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or



OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

<b>Reproductive Toxicity:</b>	May damage fertility or the unborn child.
<b>Specific Target Organ Toxicity - Single Exposure:</b>	Causes damage to organs.
<b>Specific Target Organ Toxicity - Repeated Exposure:</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration Hazard:</b>	Not an aspiration hazard.
<b>Chronic Effects:</b>	Causes damage to organs through prolonged or repeated exposure.

## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	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.
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Components		Species	Test Results
METHANOL (CAS 67-56-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

*\* Estimates for product may be based on additional component data not shown.*

<b>Persistence and Degradability:</b>	No data is available on the degradability of this product.
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**Bioaccumulative Potential:**

**Partition coefficient n-octanol / water (log Kow)**

-0.77

<b>Mobility in Soil:</b>	No data available.
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**Other Adverse Effects:** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## Section 13: DISPOSAL CONSIDERATIONS

**Disposal Instructions:** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local Disposal Regulations:** Dispose in accordance with all applicable regulations.

**Hazardous Waste Code:** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

### US RCRA Hazardous Waste U List: Reference

METHANOL (CAS 67-56-1) U154

**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 (see: Disposal instructions).

**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

**UN Number:** UN1230

**UN Proper Shipping Name:** METHANOL

**Transport Hazard Class(es):**

**Class** 3

**Subsidiary Risk** -

**Packing Group:** II

**Special Precautions for User:** Read safety instructions, SDS and emergency procedures before handling.

**ERG Number:** 131

DOT information on packaging may be different from that listed.

DOT:



## 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 (CAS 67-56-1) Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard Categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous Chemical

Yes

#### SARA 313 (TRI reporting)

### Chemical name

% by wt.

METHANOL (CAS 67-56-1)

100

### Other Federal Regulations

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

METHANOL (CAS 67-56-1)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Contaminate candidate list

### US State Regulations

US. California Controlled Substances. CA Department of Justice  
(California Health and Safety Code Section 11100)

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations  
(Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

METHANOL (CAS 67-56-1)

**US. Massachusetts RTK - Substance List**

METHANOL (CAS 67-56-1)

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

METHANOL (CAS 67-56-1)

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

METHANOL (CAS 67-56-1)

**US. Rhode Island RTK**

METHANOL (CAS 67-56-1)

**US. California Proposition 65**

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

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

METHANOL (CAS 67-56-1)

Listed: March 16, 2012

**International Inventories**

Country(s) or region	Inventory name	On inventory*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**Section 16: OTHER INFORMATION**

**HMIS® ratings:**

Health: 4  
Flammability: 3  
Physical hazard: 0

**NFPA ratings:**

Health: 1

Flammability: 3  
Instability: 0

**Disclaimer:**

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