

# Methyl Alcohol (Methanol)



REVISION DATE 01/17/2024

## SAFETY DATA SHEET

### SECTION 1 IDENTIFICATION

Product Identifier:	Methanol
Synonyms:	Wood alcohol ; Carbinol ; Wood spirit ; Methyl hydroxide
Chemical Formula:	CH <sub>3</sub> OH
Molecular Weight:	32.04
Commodity Number:	A00170 ; A01120 ; PC3150M ; PC3253M ; X00126 ; X00520 ; A01319
Applications:	Solvent ; laboratory reagent
Manufacturer:	Brand-Nu Laboratories, LLC 377 Research Parkway Meriden, CT 06450 Telephone: 203-235-7989
24 Hour Emergency Telephone Number	VelocityEHS (Toll free in U.S. and Canada) 800-255-3924 813-248-0585 VelocityEHS (International) +1-813-248-0585

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Classification

Flammable liquids (Category 2) H225  
 Acute toxicity, Oral (Category 3) H301  
 Acute toxicity, Inhalation (Category 3) H331  
 Acute toxicity, Dermal (Category 3) H311  
 Specific target organ toxicity - single exposure (Category 1) H370  
 Eye irritation (category 2B) H320

#### GHS Label and Precautionary Statements

##### Pictogram



##### Signal Word

**DANGER**

##### Hazard Statements

H225 Highly flammable liquid and vapor.  
 H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.  
 H320 Causes eye irritation.  
 H370 Causes damage to organs.

##### Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Lenses, if present and easy to do. Continue rinsing.  
 P307 + P311 IF exposed: Call a POISON CENTER/doctor/physician.  
 P403+P235 Store in a well ventilated place. Keep cool.

Hazards not otherwise classified  
 None

## SECTION 3

CHEMICAL IDENTITY Substances	CAS NO.	EC-NO.	%
Methanol	67-56-1	200-659-6	100%

COMPOSITION/  
INFORMATION  
ON INGREDIENTS

## SECTION 4

## FIRST AID MEASURES

Inhalation :	Immediately remove to fresh air. If breathing is difficult give oxygen. Seek medical attention.
Ingestion :	<b>Do not induce vomiting.</b> If conscious give large amounts of water, milk, or milk of magnesia. Seek immediate medical attention. Never give anything by mouth to an unconscious person.
Eye Contact :	Immediately flush eyes with fresh water for at least 15 minutes, lifting upper and lower eyelids occasionally.
Skin Contact :	Flush skin with fresh water for at least 15 minutes while removing contaminated clothing and/or shoes. Thoroughly clean clothing or shoes before reuse.
	<p><b>THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS OF OVEREXPOSURE ARE:</b></p> <p>Inhalation may cause slight irritation to the mucous membranes. Toxic effects may be exhibited on the nervous system, especially the optic nerve. Headache, nausea, vomiting, dizziness, blurred vision, blindness, and may be fatal. Usual fatal dose: 100 – 125 ml.</p> <p>Ingestion: Toxic. Symptoms parallel inhalation. May intoxicate and cause blindness. Symptoms may include nausea, vomiting, dullness, and visual disorders. Material may be absorbed into the body from ingestion.</p> <p>Skin contact may cause the skin to become dry and cracked. Skin absorption may occur. Symptoms parallel inhalation.</p> <p>Eye contact causes irritation, with burning, sensation, redness, tearing, inflammation, and may cause lesions over time.</p>

## SECTION 5

## FIRE FIGHTING MEASURES

Flash Point	54° F	Flammable Limits	Upper	36 %
Method Used	TCC		Lower	6 %
Auto Ignition Temperature	860° F			
Suitable Extinguishing Media	Alcohol resistant foam, dry chemical, carbon dioxide. Water may be ineffective.			

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Special Firefighting Procedures	Wear proper protective equipment and SCBA with full face-piece operated in the positive pressure mode. Move fire exposed containers from area if it can be done without risk.				
Unusual Fire And Explosion Hazards	Vapors may flow along surfaces to distant sources of ignition and flash back.				
Combustion Products	Carbon oxides				
Rating Scale 0 = None 1 = Slight 2 = Moderate 3 = Severe 4 = Extreme	<b>NFPA Rating</b>				
	Health	2			
	Flammability	3			
	Reactivity	0			
	Other				

### SECTION 6 ACCIDENTAL RELEASE PROCEDURES

Steps To Be Taken In Case Of Spills	Immediately shut off all sources of ignition. Absorb spill on vermiculite or diatomaceous earth. Pick up with a clean scoop and place in a plastic bag for later disposal. Flush spill area with fresh water.
Waste Disposal Method	Do not dump into sewers, on the ground, or any body of water. Disposal practices must be in compliance with all existing federal, state and local environmental regulations.

### SECTION 7 HANDLING & STORAGE

Keep in tightly closed container. Keep away from heat, flames or other sources of ignition. Store in a cool, dry ventilated storage area, away from direct sunlight. Wash thoroughly after handling. See section 10 for incompatibles.

### SECTION 8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

Ventilation:	A system of local or general exhaust is recommended to keep employee exposures below airborne exposure limits. Ventilation must be provided with non-sparking explosion proof equipment.				
Respiratory Protection:	None required where adequate ventilation conditions exist. If exposure limit is exceeded, a personal respirator as specified by the appropriate regulatory agency or respirator supplier should be used.				
Eye/Skin Protection:	Safety goggles, uniform or protective work clothing, chemically resistant rubber gloves.				
CHEMICAL ID	CAS NO.	OSHA PEL	ACGIH TLV	OTHER LIMITS	%
Methanol	67-56-1	200ppm TWA	200ppm TWA	STEL 250ppm TWA 6000ppm IDLH	100%

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	64.5° C	Relative Density/Density	0.8
Vapor Pressure (mm Hg)	97 @20° C	Vapor Density (Air=1)	1.1
pH	N.A.	Viscosity	N.A.
Flammability	N.A.	Odor Threshold	N.A.
Flash Point	9.7 °C (49.5 °F) - closed cup	Solubility In Water	Completely miscible
Melting/Freezing Point	- 98° C	Evaporation Rate (Butyl Acetate = 1)	5.9
Partition Coefficient N-Octanol/Water	-0.77		
Appearance And Odor	Clear, colorless liquid with alcoholic odor.		
Auto Ignition Temp.	860° F	Decomposition Temp.	N.A.

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	Lower		Upper	
Flammability Or Explosive Limits	6%		36%	

<b>SECTION 10</b>  <b>STABILITY &amp; REACTIVITY</b>  <b>DATA</b>	Chemical Stability	Stable  Unstable	XXX			
	Reactivity	Vapors may form explosive mixture with air.				
	Conditions To Avoid	Heat, flames, other sources of ignition.				
	Incompatibility	Strong oxidizing agents, nitrates, perchlorates, sulfuric acid. May react with metallic aluminum and generate explosive hydrogen gas.				
	Hazardous Decomposition Products	Carbon monoxide, carbon dioxide. Heating to decomposition will form formaldehyde.				
	Hazardous Polymerization	Will Not Occur	XX		Will Occur	

<b>SECTION 11</b> <b>TOXICOLOGICAL INFORMATION</b>	<b>PRIMARY ROUTES OF EXPOSURE</b>							
	Inhalation	Yes	Ingestion	Yes	Skin Absorption	Yes	Eye Contact	Yes
	<b>CARCINOGENICITY</b>							
	NTP	No	Z- LIST	No				
	IARC	No	OSHA	No				
	<p>Toxicity Data:            LD<sub>50</sub> Oral – Rat 5628mg/Kg            LC<sub>50</sub> Inhalation –Rat 64000ppm/4 H.</p> <p>Reproductive Effects: Damage to fetus not classifiable.            Fertility Oral – Rat: TD<sub>LO</sub> 35295 mg/Kg (Female 1 – 15 days after conception)</p> <p>Specific Target Organs:            Specific target organ toxicity - single exposure (Globally Harmonized System)            Causes damage to organs. Eyes, skin, mucous membranes, central nervous system, liver, kidney, heart.            Specific target organ toxicity - repeated exposure (Globally Harmonized System)            The substance or mixture is not classified as specific target organ toxicant, repeated exposure.</p> <p>Medical Conditions Generally            Aggravated By Exposure: Individuals with preexisting skin, eye, liver, or kidney disorders may be more susceptible to the effects of this product.</p>							

<b>SECTION 12</b> <b>ECOLOGICAL INFORMATION</b>	Toxicity to fish mortality LC50 - Lepomis macrochirus (Bluegill) - 15,400.0 mg/l - 96 h
	When released into soil this material is expected to quickly biodegrade. When released into soil this material is expected to leach into ground water. When released into water this material is expected to quickly biodegrade. When released into the air this material is expected to quickly photochemically degrade.

<b>SECTION 13</b> <b>DISPOSAL CONSIDERATIONS</b>	Do not dump into sewers, on the ground, or any body of water. Disposal practices must be in compliance with all existing federal, state and local environmental regulations.
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**SECTION 14  
TRANSPORTATION**

Proper Shipping Name	Methanol
Hazard Class	3
Packing Group	II
UN / NA Number	UN 1230
DOT Diamond Label	FLAMMABLE
Marine Pollutant	No

**SECTION 15  
REGULATORY  
INFORMATION**

CERCLA Hazardous Substance R.Q.	5000 lbs.
SARA 302	No
SARA 311/312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	The following components are subject to reporting levels established by SARA Title III, Section 313: Methanol CAS-No. 67-56-1 Revision Date 2007-07-01

**SECTION 16  
OTHER  
INFORMATION**

Preparation Date: 06/01/15  
 Revision Date: 03/06/19 Revised Section 1 change in emergency contact information  
 03/30/22 Updated manufacturer name and logo  
 01/17/2024 Revised Section 1 name change emergency contact

ACGIH	American Conference of Government industrial hygienists	IARC	International Agency for Research on Cancer	SCBA	Self-contained breathing apparatus
AIHA	American Industrial Hygiene Association	N.A.	Not Available / Not Applicable	STEL	Short Term Exposure Limit
CAS NO.	Chemical Abstracts Service number	N.E.	Not Established	TLV	Threshold Limit Value
CEILING	Exposure Level Never to Be Exceeded	NTP	National Toxicology Program	TSCA	Toxic Substances Control Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	OSHA	Occupational Safety & Health Administration	WEEL	Workplace Environmental Exposure Limit
EPA	Environmental Protection Agency	PEL	Permissible Exposure Limit	Z-LIST	Part 1910 – OSHA Standards Subpart Z Toxic and Hazardous Substances
GHS	Global Harmonization System	SARA	Superfund Amendments and Reauthorization Act		

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Prepared by BNL Safety Group