BBC Biochemical MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Common Name:	**Methyl Alcohol**	**Code:**	**9941**
Supplier:	**BBC Biochemical**	**MSDS#:**	**9941**
Synonym:	**Wood alcohol, Methanol, Carbinol,**	**Validation Date:**	**4-17-09**
Trade Name:	**Alcohol**	**Print Date:**	**4-17-09**
Material Uses:	**Solvent, Dehydratant**	**Responsible Name:**	**Dr. B**
Manufacturer:	**BBC Biochemical PO Box 1320 409 Eleanor Lane Mount Vernon, WA 98273 1-800-635-4477**	**In Case of Emergency:**	**1-800-424-9300 Chemtrec USA 1-202-483-7616 Chemtrec Intrl 1-800-635-4477**

Section 2. Composition and Information on Ingredients

Name	CAS#	% by Weight	OSHA PEL/ACGIH TLV
1) Methyl Alcohol	67-56-1	100%	200 ppm/200 ppm

Section 3. Hazards Identification

Physical State and Appearance	Colorless liquid, characteristic alcoholic odor.
Emergency Overview	Poison! Flammable liquid and vapor. May be fatal or cause blindness if swallowed. Avoid prolonged breathing of vapors. Avoid contact with eyes and skin. Cannot be made non-poisonous. May cause damage to lungs and central nervous system. Absorption through skin may be harmful.
Routes of Entry	Inhalation, ingestion or skin contact.
Potential Acute Health Effects	
Eyes	Liquid or vapor may cause eye irritation. Continued exposure may cause eye lesions.
Skin	Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation or dermatitis (rash).
Inhalation	Excessive exposure to this product may cause headache, CNS depression, drowsiness, dizziness, loss of appetite, irritation of the respiratory tract, drunkeness, unconsciousness, or death.
Ingestion	Poisonous! May be fatal or cause blindness if swallowed. Ingestion may have a narcotic effect including signs of CNS depression such as dizziness, headache, drowsiness, loss of coordination, and fatigue.
Potential Chronic Health Effects	Marked impairment of vision has been reported. Repeated or prolonged exposure may cause skin irritation.
Medical Conditions Aggravated by Overexposure	Preexisting eye, skin and respiratory conditions may be aggravated by exposure to this product.
Overexposure/ Signs/Symptoms	Shortness of breath, confused behavior, redness of skin, swelling of tissues, watery eyes, and nausea.

Section 4. First Aid Measures

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.
Skin Contact	Remove contaminated clothing and shoes. Flush skin with water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.
Inhalation	Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do not give liquids if victim is unconscious or drowsy. Otherwise, give two glasses of water to dilute chemical. Seek medical attention. Do not induce vomiting.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable liquid and vapor.

Auto-ignition Temperature	464°C (867°F)
Flash Points	12° C (52° F)
Flammable Limits	LEL: 6.00%; UEL: 36.00%
Products of Combustion	Not available.
Fire Hazards in Presence Of Various Substances	Not available.
Explosion Hazards in Presence of Various Substances	Not available.
Fire Fighting Media and Instructions	"Alcohol" foam, dry chemical, or CO^2. Clear fire area of unprotected personnel. Cool fire exposed containers with water.
Protective Clothing (Fire)	Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA.
Special Remarks on Fire Hazards	When heated above the flash point this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mist or spray may be flammable at temperatures below the flash point.
Special Remarks on Explosion Hazards	Carbon monoxide and unidentified organic compounds may be formed during combusion.

Section 6. Accidental Release Measures

Small Spill and Leak	Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.
Large Spill and Leak	Same as above.

Section 7, Handling and Storage

Handling	Surfaces that are hot may ignite liquid even in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.
Storage	Keep away from heat, sparks, and flame. Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

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.
Personal Protection	
Eyes	Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.
Body	Wear impervious protective clothing if there is a potential for skin contact.
Respiratory	If exposure exceeds occupational exposure limits use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.
Hands	Neoprene, Nitrile or natural rubber gloves.
Feet	Impervious footwear.
Personal Protection in Case of a Large Spill	

Product Name	**Exposure Limits**
1)Methyl Alcohol	OSHA PEL 200 ppm TWA; ACGIH TLV 200ppm TWA, 250ppm STEL Skin
2)	
3)	

Consult Local authorities before acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Clear, colorless liquid.	**Odor:**	Characteristic odor.
Molecular Weight	32.04	**Taste:**	Not available.
Molecular Formula	CH3OH	**Color:**	Colorless.
pH (1%/Water)	Not applicable.		
Boiling/Condensation Point	Not applicable.		
Melting/Freezing Point	-98° C (-144°F)/Not applicable.		
Critical Temperature	Not applicable.		
Specific Gravity	0.79		
Vapor Pressure	96 mmHg. @ 20°C		

Vapor Density	Heavier than air.
Volatility	100%
Odor Threshold	Not applicable.
Evaporation Rate	Slower than ether.
VOC	Not available.
Viscosity	Not available.
Ionicity (in water)	Not available.
Dispersion Properties	Not available.
Solubility	Soluble in water.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity	Stable.
Conditions of Instability	Avoid heat, flame, and other sources of ignition.
Incompatibility with Various Substances	Strong oxidizers.
Hazardous Decomposition Products	None.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Oral rat: 5628 mg/kg; Skin rabbit 15800 mg/kg LC50: Inhalation rate: 64000 ppm/4H
Chronic Effects on Humans	Poison. May be fatal or cause blindness if swallowed. Cannot be made unpoisoness.
Other Toxic Effects on Humans	Methyl alcohol is listed as a toxic chemical on the SARA Title III, Sec. 313 list. For Sec. 311/312 reporting, methyl alcohol is listed as an immediate (acute) health hazard, and a fire hazard. None of the chemicals in this product are found on the extremely hazardous substance list.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.
BODS and COD	Not available.
Biodegradable/OEDC	Not available.
Mobility	Not available.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on The Products of Biodegradation	Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

Section 13. Disposal Considerations

Waste Information	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Waste Stream	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to

	a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	Domestic (Land, D.O.T.) ---------- Proper Shipping Name: METHANOL Hazard Class: 3 UN/NA: UN1230 Packing Group: II Information reported for product/size: 358LB International (Water, I.M.O.) ---------- Proper Shipping Name: METHANOL Hazard Class: 3, 6.1 UN/NA: UN1230 Packing Group: II Information reported for product/size: 358LB
Marine Pollutant	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not applicable.
TDG Classification	Proper Shipping Name: METHANOL Hazard Class: 3 UN/NA: UN1230 Packing Group: II Information reported for product/size: 358LB
ADR/RID Classification	ADR (Europe) Information not available.
IMO/IMDG Classification	IMDG Information not available.
ICAO/IATA Classification	See IATA Regulations Proper Shipping Name: METHANOL Hazard Class: 3, 6.1 UN/NA: UN1230 Packing Group: II Information reported for product/size: 358LB

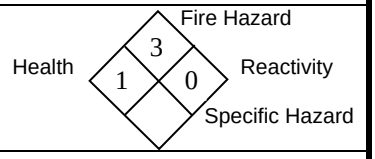
Section 15. Other Information

Label requirements

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	3
Reactivity	0
Personal Protection	

National Fire Protection Association (U.S.A.)



References

Other Special Considerations

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.