



MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY:

METHANOL

Note: Read this MSDS before handling and disposing of this product and pass this information on to the employees, customers, and users of this product. This product is covered by the OSHA Hazard Communication Rule and this document has been prepared in accord with the MSDS requirements of this rule.

Section I

Manufacturer's name:

Atlantic Methanol Production Company, L.L.C.

Address (Number, Street, City, State and ZIP Code):

12600 Northborough Drive, Suite 150

Houston, Texas 77067 USA

Emergency Telephone Number

1 (800) 424-9300 (Chemtrec)

Telephone Number for Information

1 (281) 885-1286 (AMPCO Customer Services)

Date Prepared

25 August 2005

Signature of Preparer (optional)

Section II—Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))

OSHA PEL ACGIH TLV Other Limits Recommended % (optional)

Methanol CAS 67-56-1

200 PPM 200 PPM

99-100%

250 STEL

Placard 1230

Packaging Group II

Other Names: Wood Alcohol ; Methyl Alcohol

Generic Name: Methanol

Chemical Family: Aliphatic Alcohol's

Section III—Physical/Chemical Characteristics

Boiling Point

AP 147F (at 760 mm Hg)

Specific Gravity (H₂O = 1)

AP .792

Vapor Pressure (mm Hg)

AP 96 (at 68F)

Melting Point

AP -137F, -94C

Vapor Density (AIR = 1)

NA

Evaporation Rate (Butyl Acetate = 1)

NA

Solubility in Water Complete (in all proportions)

Appearance and Odor Faint, alcohol odor; Liquid; Clear, colorless

Section IV—Fire and Explosion Hazard Data

Flash Point (Method Used)	AP 50F (TCC)	Flammable Limits	LEL 6 (%vol. in air)	UEL 36.5 (% vol. in air)
Extinguishing Media	Foam for alcohol's; CO2; Dry Chemical; Water Spray; Water Fog			
Special Fire Fighting Procedures	Do not enter fire area without proper protection. Fight fire from safe distance/protected location. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk to burns/injuries. Apply aqueous extinguishing media carefully to avoid frothing and limit exposure of nearby equipment. Notify authorities immediately if liquid enters sewer/public waters.			
Unusual Fire and Explosion Hazards	Releases flammable vapors below ambient temperatures. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Mixtures with water and as little as 21% (by vol.) methanol are still flammable (flash point less than 104F). Under some circumstances, may corrode certain metals, including aluminum and zinc and generate hydrogen gas. A methanol fire may not be visible to the naked eye.			

OSHA 174 Sept. 1985

Section V—Reactivity Data

Stability	Unstable	NA	Conditions to Avoid Heat, sparks, open flame, other ignition sources and oxidizing conditions
	Stable	Stable	
Incompatibility (Materials to Avoid):	Aluminum metals; any reactive metal which will displace hydrogen; certain forms of plastics; Coatings; Rubber; Strong oxidizing agents; Zinc		
Hazardous Decomposition or Byproducts	Incomplete combustion may produce carbon monoxide, formaldehydes, and other toxic gases.		
Hazardous Polymerization	May Occur	NA	Conditions to Avoid
	Will Not Occur	NO	NA

Section VI—Health Hazard Data

Route(s) of Entry	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic)	Acute: Moderate inhalation hazard; Moderate eye irritant; Moderate ingestion hazard; Slight skin irritant; Moderate skin absorption hazard Chronic: Since this material contains Methanol, consumption of 1 to 2 ounces (25 to 50 ml) could lead to metabolic acidosis, damage to the optic nerve, blindness, and death		
Carcinogenicity	NTP? No	IARC Monographs? No	OSHA Regulated? Yes

Signs and Symptoms of Exposure

Inhalation: Over exposure may cause coughing, shortness of breath, dizziness, intoxication, and collapse.
Eye Contact: May cause moderate irritation, including burning sensation, tearing, redness, or swelling.
Skin Absorption: Exposure to this material can result in absorption through the skin, causing a significant health hazard
Skin Irritation: May produce skin irritation.
Ingestion: This material contains Methanol. Swallowing as little as 1 to 2 ounces (25 to 50 ml) of Methanol can result in metabolic acidosis leading to optic nerve damage ranging from diminished visual capacity to complete blindness and death

Medical Conditions

Generally Aggravated by Exposure. Persons with chronic respiratory, liver, kidney, eye, and skin disease.

Emergency and First Aid Procedures

Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential
Eye Contact: In case of eye contact, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention.
Skin Contact: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill affect of irritation develops.
Ingestion: If swallowed, give lukewarm water (pint / ½ liter) if victim is completely conscious/alert. INDUCE VOMITTING. Obtain emergency medical attention. Prompt action is essential.

Section VII—Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Extremely flammable liquid. Release immediately causes fire/explosion hazard. Liquid/vapors may ignite. Evacuate/limit access. Equip responders with proper protection. Extinguish all ignition sources. Stop release. Prevent flow to sewer/public waters. Restrict water use for cleanup. Notify fire and environmental authorities. Impound/recover large land spill. Blanket with fire fighting foam. Soak up small spills with inert solids. Use suitable disposal containers. On water, material is soluble and may float or sink. May biodegrade. Contain/collect rapidly to minimize dispersion. Disperse residue to reduce aquatic harm. Report per regulatory requirements.

Waste Disposal Method

Contaminated product/soil/water may be U.S. Resource and Recovery Act (RCRA)/U.S. Occupational Safety and Health Administration (OSHA) hazardous waste (See 40 U.S. Code of Federal Regulations (CFR) 261 and 29 CFR 1910). If spent solvent intended for disposal, may be designated F005; If spill cleanup residue U154 under U.S. Resource Conservation and Recovery Act (RCRA) listings. Landfill solids are permitted sites. Use registered transporters. Burn concentrated liquids in systems designed for low flash point material. Avoid flame-outs. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

Precautions to Be Taken in Handling and Storing

Store only in tightly closed, properly ventilated containers away from heat, sparks, open flame and strong oxidizing agents. Use only non-sparking tools. Blanket storage with dry inert gas. Store closed drums with bung in up position. Carefully vent any internal pressure before removing closure. Properly ground containers before beginning transfer. Will absorb atmospheric moisture. All equipment must conform to applicable electrical code. Carbon steel is satisfactory material of construction. Do not store in aluminum, zinc (galvanized) or other corrodable containers. Handle empty containers with care – residue may be flammable/poisonous.

Other Precautions

Decontamination Procedures: Isolate, vent, drain, wash, and purge systems or equipment before maintenance or repair. Remove all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry.

Section VII—Control Measures

Respiratory Protection (Specify Type)

If exposure can exceed the Personal Exposure Limit (PEL)/Threshold Limit Value (TLV), only U.S. National Institute for Occupational Safety and Health (NIOSH) or U.S. Mine Safety and Health Administration (MSHA) approved supplied air or self-contained breathing apparatus operated in positive pressure mode are satisfactory. Do not use air purifying respirators.

Ventilation	Local Exhaust	Yes	Special	NA
	Mechanical (General)	NA	Other	NA
Protective Gloves	Impervious		Eye Protection	Splash Proof Safety Goggles

Other Protective Clothing or Equipment

Wear impervious clothes/equipment to avoid repeated/prolonged skin contact.

Work/Hygienic Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.
