



## METHANOL

### 1. CHEMICAL IDENTITY

Chemical Name :	Methanol	Chemical Classification :	Alcohol
Synonyms :	Methyl Alcohol, wood alcohol, wood spirit, Colonial Spirit	Trade Name :	
Formula :	CH <sub>3</sub> OH	C.A.S. No. :	67-56-1
		U.N. No.:	1230

#### Regulated Identification :

Shipping Name :	Methanol		
Codes/Label :	Flammable Liquid, Class 3	Hazchem Code No. :	2 P E
Hazardous waste	17		
I.D. No. :			
Hazardous ingredients :	C. A. S. No.		
1. Methyl alcohol	67-56-1		

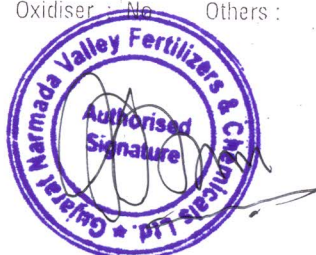
### 2. PHYSICAL AND CHEMICAL DATA

Boiling Range/point degree C :	64.5	Physical State:	Liquid	Appearance :	Colourless, Watery
Melting/Freezing Point degree C :	- 97.8			Odour :	Alcoholic odour
Vapour Pressure at 35 degree C :	100		mm Hg at 21.2 degree C		
Vapour Density : 1.10 (Air = 1)		Solubility in water at 30 degree C :	Miscible	Others :	Miscible with Ethanol, Ether, Benzene, Ketones & Other Organic solvents. Vapours forms explosive mixtures with air and Oxygen.

Specific Gravity : 0.79      pH: Neutral  
Water = 1

### 3. FIRE AND EXPLOSION HAZARD DATA

Flammability : Yes	LEL : 6.0 % UEL : 36.5 %	Flash Point degree C : 16.1 (OC) vapours form explosive mixture with air/oxygen.	Autoignition temperature degree C
TDG Flammability : 3		Flash Point degree C : 11.11 (CC)	463.8
Explosion Sensitivity to Impact : Stable		Explosion Sensitivity to Static Electricity : Yes. Vapours are explosive	Hazardous Combustion Products : Emits acrid smoke and irritating fumes, CO.
Hazardous Polymerisation.:	Will not occur		
Combustible liquid : Yes	Explosive	Corrosive	NO
	Material : No	Material :	
Flammable Material : Yes	Oxidiser : No	Others :	No





Pyrophoric Material : No

Organic Peroxide : No

#### 4. REACTIVITY DATA

Chemical Stability :

Stable

Incompatibility with other material :

Strong Oxidisers, Beryllium Dihydride, Metals (K, Mg), Carbon Tetra chloride + Metals (Al, Mg, Zn), Oxidants.

Reactivity :

Violent reaction with alkaline aluminium salt, acetyl bromide, chloroform + sodium hydroxide, Nitric acid, HClO<sub>4</sub>, P<sub>2</sub>O<sub>3</sub>.

Hazardous Reaction Products :

Combustion will produce carbon monoxide and asphyxiants.

#### 5. HEALTH HAZARDS DATA

Routes of

Inhalation, Ingestion, Eyes and skin.

Entry

Effects of

Exposure/Symptoms

High concentrations can produce central nervous system depression and optic nerve damage. 50,000 ppm will probably cause death in 1-2 hrs. is absorbed through skin. Swallowing may cause death or eye damage.

Eyes Liquid may cause conjunctival irritation and transient corneal damage. vapour may cause conjunctival irritation.

Skin Material may cause irritation. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Liquid may be absorbed through the skin in toxicologically significant amounts if area of contact is large and exposure prolonged.

Ingestion Swallowing may have the following effects : Symptoms similar to alcohol intoxication, Central nervous system depression, nausea, vomiting, loss of co-ordination, temporary or permanent blindness, coma and death.

Inhalation Exposure to vapour may have the following effects :- Headache. Exposure to vapour at concentrations of 1000 ppm and above may have the following effect Systemic effects similar to those resulting from ingestion. Because of slow elimination from the body repeated exposures may result in accumulation.

Emergency Treatment

Remove the victim from exposed area and apply artificial respiration if breathing has stopped. Induce vomiting and give 2 teaspoons of baking soda in a glass of water. In case of skin or eyes flush with plenty of water for 15 minutes. Seek medical aid.

TLV (ACGIH) Permissible Exposure Limit	200 ppm	260 mg/m <sup>3</sup>	STEL : 250 ppm, 310 mg/m <sup>3</sup>
LD - 50 (Oral Rate)	200 ppm	260 mg/m <sup>3</sup>	Odour Threshold
NFPA Hazard Signals	5629 mg/kg	IDLH	100 ppm, 130.87mg/m <sup>3</sup>
	Health	Flammability	25000 ppm, 19230 mg/m <sup>3</sup>
	1	3	Reactivity Special
			0

