4. MSDS of Diesel

1. Chemical identity

Chemical name: Diesel Oil Chemical classification: Flammable liquid
Synonyms: Automotive Diesel Oil Trade name: HSD
Formula Range: C13 - C18 C.A.S. NO.68476-30-2. U.N.NO. 1202
Regulated identification Shipping name: HSD Codes/Label: Hazchem code class 3 Hazardous waste : N.A.
Hazardous ingredients C.A.S.NO. Hazardous ingredient C.A.S.NO. Diesel 68476-30-2 Benzene Trace 71-43-2 Naphthalene Trace 91-20-3 Sulphur Trace 7704-34-9 Diesel is complex mixture of hydrocarbons .It's exact composition depends on the source of crude oil from which it is produced and the refining methods used

2. Physical and chemical data

Boiling point/Range (deg.C): 215 - 376. *Physical state*: Liquid. *Appearance*: yellowish brown *Melting/freezing point (deg.C)*: N. A. *Vapour pressure*: 2.12 to 26mm Hg at 21 deg C. *Odour*: Perceptible odour *Vapour density*: N.A. *Solubility in water @ 30 deg.C*: Insoluble *Specific gravity*: 0.86 - 0.90 at 20 deg C *Others*: Pour Point: 6 - 18 deg. C.

3. Fire and explosion Hazard data Material Safety data sheet

Flammability: Yes *LEL*: 0.6% *Flash point (deg C)*: 32 deg C. *TDG Flammability*: class 3. UEL: 6% *Flash point(deg C)* : N.A. deg C.
Auto Ignition Temp : 225 deg. C *Explosion sensitivity to impact*: not sensitive to Mechanical Impact. *Explosion sensitivity to static electricity*: For vapors sensitivity exist *Hazardous Combustion Products*: carbon monoxide, Nitrogen oxide. and other aromatic hydrocarbons *Hazardous Polymerization*: N.A.

Combustible liquid: Yes	*Explosive material*: Yes	*Corrosive material*: No
Flammable material ; yes	Oxidizer: N.A.	
Pyrophoric material: N.A.	*Organic peroxide*: N.A.	

4. Reactivity data

Chemical stability: Stable
Incompatibility with other material: oxidizers such Peroxides ,Nitric acid and Perchlorates
Hazardous reaction products: on fire it will liberate some amount of Carbon monoxide, sulphur dioxide Nitrogen oxide. and other aromatic hydrocarbons

5. Health Hazard data

Routes of entry: : Inhalation, Skin absorption ,Ingestion
Effects of Exposure / symptoms: Excessive inhalation Vapors cause rapid breathing, excitability, staggering, headache, fatigue, nausea and vomiting, dizziness, drowsiness, narcosis convulsions, coma
Skin Contact: Skin-dryness, Cracking, Irritation eyes watering, Stinging and inflammation.

Emergency treatment: In case of Eye or Skin contact, flush with plenty of water. Remove soaked clothing. in case of excessive inhalation move the victim to fresh air, obtain medical assistance

L.D50 (Oral-Rat):> 5g/kg	*L.C 50*: *(rat 4hrs)* 5g/m3	*Permissible Exposure limit*: N.A.
Odour threshold: N.A.	*TLV (ACGIH)* : 800 ppm	*STEL*: N.A.

NFPA Hazard signals Health Flammability Reactivity/Stability Special 1 2 0 -