

**MATERIAL SAFETY DATA SHEET****BENZENE**

Chemical Name :	BENZENE Chemical classification: Aromatic hydrocarbon
Synonyms:	Benzol, coal naphtha
Trade Name:	Formula :C ₆ H ₆ CAS # 71-43-2 ;UN # 1114
Regulated Identification:	Shipping Name: Benzene Hazchem Code 3 WE
Codes/Label:	Flammable Liquid. Class 3 ,Hazardous Waste ID No.5
Hazardous Ingredients:	None

Company Identification:	Hazel Mercantile Limited
Company Identification: (INDIA)	701/712 A, Embassy Centre, Nariman Point, Mumbai - 400 021.
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2. Physical/Chemical Data

Physical State	Liquid
Appearance	Colourless
Odour	Aromatic
Boiling Pt/Range	80.99°C
Vapour Pressure	100 mm Hg at 26.1°C
Melting/Freezing Pt	5.51°C
Vapour Density	2.77 (Air=1)
Solubility in water at 30°C	Not Soluble Others: Miscible with Alcohol ; : Chloroform, Ether.CS ₂ , CCl ₄ , Acetone
Specific Gravity at 20°C	0.879 (Water =1) (Liq)
pH	Neutral

3. Fire/Explosion Hazard Data

Flammability	YES : LEL 1.4% ; UEL 8.0 %
TDG Flammability	3
Flash Point °C	11.1 (OC) ; -11°C (CC)
Autoignition Temperature °C	562.2
Explosion sensitivity to impact	Stable
Explosion sensitivity to static electricity	Data not available
Hazardous Combustion Products	Not available
Hazardous Polymerization	Will not occur
Combustible Liquid	YES



4. Reactivity Data

Chemical Stability	Stable
Incompatibility with other material	Strong Oxidisers, Chlorine, Bromine, and Iron
Reactivity	Reacts vigorously with Oxidising agents. Vigorous or incandescent reaction with Hydrogen + Raney Nickel Catalyst (Above 210°C), Uranium Hexafluoride and Bromine Trifluoride.
Hazardous Reaction Products	Forms sensitive, explosive mixtures with iodine Pentafluoride, silver perchlorate, nitryl perchlorate, liquid oxygen, O ₃ , AS ₂ F ₅ + Potassium methoxide

5. Health Hazard Data

Routes of entry	Inhalation, Ingestion, Skin and Eyes
Effects of Exposure	Symptoms Skin, Gets absorbed, Causes pain, dullness, dizziness, unconsciousness, leukemia.
Ingestion:	Burning sensation in mouth and stomach.
Emergency Treatment	Skin: if affected, remove soaked clothes and boots and wash thoroughly the affected area with plenty of water and soap.
Eyes:	Flash with plenty of water until irritation subsides.
Inhalation.	Remove from exposure immediately. If breathing is irregular or stopped, start resuscitation, administer oxygen. Seek immediate medical aid.
LD50 (Oral-Rat)	3400 mg/kg STEL Not listed ppm Not listed mg/m ³
Permissible Exposure Limit	10 (S.H.C) ppm 30 (S.H.C)mg/m ³ Odour Treshold 4.68 ppm 14.93mg / m ³
TLV (ACGIH)	10 (S.H.C) ppm 30 (S.H.C) mg/m ³

6. Preventive Measures

Personnel	Avoid contact with liquid and vapour
Protective equipment	Use Hydrocarbon vapour canister, Hydrocarbon – insoluble rubber or plastic gloves, hydrocarbon – insoluble apron such as neoprene and shoes.
Handling & Storage Precautions	Store in a cool fire-proof place with ventilation. Keep away from strong oxidising agents.

7. Emergency/First Air Measures / Fire :

Fire Extinguishing Media	Foam Carbon Dioxide, Dry Chemical Powder
Special Procedure	Keep the containers cool by spraying water if exposed to fire
Unusual hazards	Flash back along vapour trail may Occur
EXPOSURE : First Aid Measures	
Inhalation	Remove the victim to fresh air, Start resuscitation
Skin	remove the wetted Clothes and wash the affected area and thoroughly with water and soap.
Eyes	wash thoroughly for 15 minutes with water. Seek medical Aid immediately
Antidotes/Dosages	Not Available
SPILLS	Shut off leaks if without risk. Contain leaking liquid on sand or earth



8. Additional Information/References

SUSPECTED HUMAN CARCINOGEN. Depending on the duration of the exposure, periodic medical check up is recommended. Prolonged exposure (even at low concentration) may cause leukemia. Use of alcoholic drink enhances the poisonous effect. Person with blood disorder should avoid contact with Benzene. High concentration can lead to unconsciousness and death. In industry, inhalation is the primary route of Chronic Benzene poisoning. Elimination chiefly through lungs. There are a great individual variation in the signs and symptoms of Chronic benzene poisoning.

10. Other Information

Msds Creation Date:	August 28, 2007
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