



MATERIAL SAFETY DATA SHEETS

249

Ethyl benzene

1. CHEMICAL IDENTITY

Chemical Name : Ethyl benzene

Chemical Classification: Flammable

Trade Name :

Synonyms: Phenylethane, Ethyl benzol

Formula : C₈H₁₀

CAS No: 100-41-4

UN No: 1175

Regulated Identification

Shipping Name : Ethyl benzene

Hazchem Code : 3YE

Codes / Label : Class 3, Flammable

Hazardous Waste ID No : 5

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Ethyl benzene	100-41-4	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 136.1

Physical State: Liquid

Appearance: Colourless liquid

Melting Pt °C: -94.9

Vapour Pressure @ 35°C mmHg: 9.6 mm Hg at 25 deg C

Odour: Aromatic

Vapour Density(Air =1): 3.66

Solubility in water at 30°C g/100ml: 169 mg/l @ 25 deg C

Others: Miscible with ether, soluble in SO₂, insoluble in NH₃.

Specific Gravity (Water =1): 0.8670 @ 20 deg C/4 deg C

pH : Neutral

3. FIRE / EXPLOSION HAZARD DATA

Flammability : Yes

LEL: 1

Flash Point °C in OC:

TDG Flammability: 3

UEL: 6.7

Flash Point °C in CC: 18

Autoignition Temperature °C : 432

Explosion sensitivity to impact: Stable

Explosion sensitivity to static Electricity: May explode due to generation of electrostatic charges.

Hazardous Combustion Products : Emits acid smoke and irritating fumes.

Hazardous Polymerization : Will not occur.

Combustible Liquid: Yes

Explosive Material: No

Corrosive Material No

Flammable Material: Yes

Oxidiser : No

Others:

Pyrophoric Material: No

Organic Peroxide : No

4. REACTIVITY DATA

Chemical Stability : Stable

Incompatibility with other material : Strong oxidisers

Reactivity : Reacts vigorously with oxidising materials. Attacks many plastics.

Hazardous :
Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Inhalation : Vapours are irritating to the nose and throat and cause dizziness, sleep and pulmonary changes
Skin : Contact with the liquid causes dermatitis.
Ingestion : May cause coma.
Eyes : Causes irritation.

Emergency Treatment :

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

LD50 (oral-rat) mg/kg: 3500	STEL: 125 ppm (545 mg/m ³)
LC50 (rat) mg/kg:	Odour Threshold: 140 ppm
Permissible Exposure Limit: 100 ppm (435 mg/m ³)	TLV (ACGIH) : 100 ppm (435 mg/m ³)

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	3	4	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Avoid contact with liquid or vapours. Provide self-contained breathing apparatus, face shield or safety goggles, PVC hand gloves, aprons to cover the body and shoes.

Handling : Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage : Store in cool, well ventilated, dry area, away from heat, flame, and oxidisers.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Foam , CO₂, dry chemical powder

Special Procedure : Keep the containers cool by spraying water if exposed to heat or fire.

Unusual Hazards : Flashback along vapour trail may occur.

EXPOSURE: First Aid Measures:

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes

while removing contaminated clothing and shoes.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Shut off leaks if without risk. Absorb on dry sand or earth.

Waste Disposal Method: Seal all waste in vapour tight plastic bags for eventual disposal.

8. ADDITIONAL INFORMATION / REFERENCES

A concentration of 0.1% vapour in air is an irritant to human eyes. Concentration of 0.2% is extremely irritating at the beginning and cause dizziness, irritation to nose and throat. A very dangerous explosion hazard when exposed to heat or flame.

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :

Contact person

MAILING ADDRESS :

in Emergency :

TELEPHONE / TELEX NOS :

Local Bodies involved :

TELEGRAPHIC ADDRESS :

Standard Packing :

OTHERS :

Trem Card Details / Ref :

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