



MATERIAL SAFETY DATA SHEETS

349

m-Dinitrobenzene

1. CHEMICAL IDENTITY

Chemical Name : m-Dinitrobenzene

Chemical Classification: Toxic

Trade Name :

Synonyms: 1,3-Dinitrobenzene, 1,3-Dinitrobenzol , 1,3-DNB

Formula : C₆H₄N₂O₄

CAS No: 99-65-0

UN No: 1597

Regulated Identification

Shipping Name :

Hazchem Code : 2X

Codes / Label : Class 6.1, Toxic

Hazardous Waste ID No :

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 m-Dinitrobenzene	99-65-0	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 302.8

Physical State: Solid

Appearance: Colourless to yellow, rhombic needles or plates

Melting Pt °C: 89-90

Vapour Pressure @ 35°C mmHg: 0.008 mmHg at 25 °C

Odour: A slight odour.

Vapour Density(Air =1): 5.8

Solubility in water at 30°C g/100ml: 0.02 g/100ml

Others: Very soluble in acetone and ethanol; soluble in ether

Specific Gravity (Water =1): 1.575 @ 18 deg C/4 deg C

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : Slightly flammable.

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC: 150

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : Fire may produce irritating, corrosive and/or toxic gases.

Hazardous Polymerization :

Combustible Liquid:

Explosive Material:

Corrosive Material

Flammable Material:

Oxidiser :

Others:

Pyrophoric Material:

Organic Peroxide :

4. REACTIVITY DATA

Chemical Stability : Stable under normal temperatures and pressures.

Incompatibility with other material : Oxidizing agents, reducing agents, and strong bases.

Reactivity :

Hazardous :

Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

May cause liver and kidney damage. May cause cancer according to animal studies. May cause reproductive and fetal effects. Ingestion : Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause liver and kidney damage. May cause cyanosis. Inhalation : Causes respiratory tract irritation. May cause effects similar to those described for ingestion. Skin : Causes severe skin irritation. Absorption into the body may cause cyanosis. Eyes : Causes severe eye irritation. May cause eye injury. Effects may be delayed.

Emergency Treatment :

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

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

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

Ingestion: 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. Induce vomiting by giving one teaspoon of syrup of Ipecac.

LD50 (oral-rat) mg/kg:

STEL:

LC50 (rat) mg/kg:

Odour Threshold:

Permissible Exposure Limit: 1 mg/m³, skin

TLV (ACGIH) : 0.15 ppm (1.0 mg/m³)

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	2	1	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

Handling : Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage : Store in a cool, dry place. Store in a tightly closed container.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media :

Special Procedure :

Unusual Hazards :

EXPOSURE: First Aid Measures:

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

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

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

Ingestion: 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. Induce vomiting by giving one teaspoon of syrup of Ipecac.

Antidotes / Dosages:**SPILLS :**

Steps To Be Taken : Vacuum or sweep up material and place into a suitable disposal container. Reduce airborne dust and prevent scattering by moistening with water. Clean up spills immediately, using the appropriate protective equipment.

Waste Disposal Method:**8. ADDITIONAL INFORMATION / REFERENCES****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 :****10. DISCLAIMER**

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