



# Central Pollution Control Board

Ministry of Environment & Forests, Govt of India, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032

## MATERIAL SAFETY DATA SHEETS

219

Dinitro-o-cresol

### 1. CHEMICAL IDENTITY

**Chemical Name :** Dinitro-o-cresol

**Chemical Classification:** Toxic

**Trade Name :**

**Synonyms:** 4,6-Dinitro-o-cresol, 2-Methyl-4,6-dinitrophenol, DNC, DNOC

**Formula :** C<sub>7</sub>H<sub>6</sub>N<sub>2</sub>O<sub>5</sub>

**CAS No:** 534-52-1

**UN No:** 1598

### Regulated Identification

**Shipping Name :** Dinitro-o-cresol

**Hazchem Code :** 2X

**Codes / Label :** Class 6.1, Toxic

**Hazardous Waste ID No :** 13

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Dinitro-o-cresol	534-52-1	3	
2		4	

### 2. PHYSICAL / CHEMICAL DATA

**Boiling Pt. °C:** 220

**Physical State:** Solid

**Appearance:** Yellow crystals

**Melting Pt °C:** 86.5

**Vapour Pressure @ 35°C mmHg:** 0.00012 mm Hg @ 25 deg C

**Odour:** Odourless

**Vapour Density(Air =1):** 6.84

**Solubility in water at 30°C g/100ml:** 198 mg/L @ 20 deg C

**Others:** Soluble in ether acetone, alcohol.

**Specific Gravity (Water =1 ):** 1.58 g/cu cm @ 20 deg C

**pH :**

### 3. FIRE / EXPLOSION HAZARD DATA

**Flammability :** No

**LEL:**

**Flash Point °C in OC:**

**TDG Flammability:**

**UEL:**

**Flash Point °C in CC:**

**Autoignition Temperature °C :**

**Explosion sensitivity to impact:** Stable

**Explosion sensitivity to static Electricity:** Stable

**Hazardous Combustion Products :** Emits toxic fumes of NO<sub>x</sub>.

**Hazardous Polymerization :** Will not occur.

**Combustible Liquid:** No

**Explosive Material:** No

**Corrosive Material** No

**Flammable Material:** No

**Oxidiser :** No

**Others:**

**Pyrophoric Material:** No

**Organic Peroxide :** No

### 4. REACTIVITY DATA

**Chemical Stability :** Stable

**Incompatibility with other material :** Strong oxidisers.

**Reactivity :** Reacts with strong oxidisers.

**Hazardous Reaction Products :**

## 5. HEALTH HAZARD DATA

**Routes of entry:** Inhalation, Ingestion, Skin & Eyes.

### Effects of Exposure / Symptoms:

Inhalation & Ingestion: Causes a feeling of discomfort, profused sweating, yellow urine, increased basal metabolism, marked thirst, vomiting, convulsions, coma and death. Skin: Causes necrosis and dangerous systemic effects. Eyes :Causes irritation. Absorption: Very high fever is a prominent sign of intoxication by absorption.

### Emergency Treatment :

**Inhalation:** Apply ice-packs to promote heat loss. Replace the fluids and electrolytes; allay anxiety. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth respiration

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

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

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

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<b>LD50 (oral-rat) mg/kg:</b> 10 mg/kg	<b>STEL:</b>
<b>LC50 (rat) mg/kg:</b>	<b>Odour Threshold:</b>
<b>Permissible Exposure Limit:</b>	<b>TLV (ACGIH) :</b> 0.2 mg/m <sup>3</sup> , skin

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NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	3	0	0	

## 6. PREVENTIVE MEASURES

**Personal Protective Equipment :** Avoid contact with solid and dust Provide dust mask, side covered safety goggles I face shield, rubber hand gloves, body overclothing

**Handling :** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation.

**Storage :** Keep in cool, dry, well ventilated area, away from oxidisers.

**Precautions :**

## 7. EMERGENCY / FIRST AID MEASURES

### FIRE:

**Fire Extinguishing Media :** Dry chemical powder, foam, water, CO<sub>2</sub>.

**Special Procedure :** Keep the containers cool by spraying water if exposed w heat or flame.

**Unusual Hazards :** Poisonous gases are produced in fire.

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### EXPOSURE: First Aid Measures:

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

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**Antidotes / Dosages:**

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**SPILLS :**

**Steps To Be Taken** : Sweep and collect without making dial. Wash the area with water and soap and soap

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

**8. ADDITIONAL INFORMATION / REFERENCES**

**9. MANUFACTURERS / SUPPLIERS DATA**

<b>NAME OF FIRM :</b>	<b>Contact person</b>
<b>MAILING ADDRESS :</b>	<b>in Emergency :</b>
<b>TELEPHONE / TELEX NOS :</b>	<b>Local Bodies involved :</b>
<b>TELEGRAPHIC ADDRESS :</b>	<b>Standard Packing :</b>
<b>OTHERS :</b>	<b>Trem Card Details / Ref :</b>

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