1. CHEMICAL IDENTIFICATION

Chemical Name: 2,4,6-Trinitrotoluene

Chemical Classification: Explosive

Synonyms: TNT, Trinitrotolul, sym-Trinitrotoluene, 1-Methyl-2,4,6-trinitrobenzene, Benzene, 2-methyl-1,3,5-trinitro

Formula: C7H5N3O6

CAS No: 118-96-7

UN No: 1356

Regulated Identification

Shipping Name: Explosive

Hazchem Code: 1W

Hazardous Waste ID No:

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 240

Physical State: Solid

Appearance: Colorless to pale-yellow solid or crushed flakes

Vapour Pressure @ 35°C mmHg: 8.02X10-6 mm Hg at 25 deg C

Odour: Odourless

Vapour Density(Air =1): 7.85

Solubility in water at 30°C g/100ml: 115 mg/L at 23 deg C

Others: Slightly soluble in ethanol; soluble in ethyl ether; very soluble in benzene, toluene, pyridine.

Specific Gravity (Water =1): 1.654 at 20 deg C/4 deg C

pH:

3. FIRE / EXPLOSION HAZARD DATA

Flammability:

LEL:

UEL:

Flash Point °C in OC: Explodes

Flash Point °C in CC:

Autoignition Temperature °C:

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products: When heated to decomp, emits highly toxic fumes of oxides of nitrogen.

Hazardous Polymerization:

Combustible Liquid:

Explosive Material:

Corrosive Material

Flammable Material:

Oxidiser:

Others:

Pyrophoric Material:

Organic Peroxide:

4. REACTIVITY DATA

Chemical Stability: Reactive at high temperature or pressure. Moderate hazard. Will detonate under strong shock.
Incompatibility with: Strong oxidizers, ammonia, strong alkalis, combustible materials, heat.
Reactivity: Rapid heating will result in detonation.
Hazardous Reaction Products: Sensitive to heat and shock. Reacts with reducing agents.

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:
Inhalation: Dyspnea and tachypnea may occur. Ingestion: Nausea and vomiting may occur. Skin: Central cyanosis unresponsive to oxygen therapy is classic. Eye: May cause burns. See inhalation.

Emergency Treatment:
Inhalation: Leave the contaminated area; take deep breaths of fresh air. If symptoms develop, call a physician
Skin: Flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, call a physician
Eyes: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center.
Ingestion: Do not induce vomiting. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and call a hospital

<table>
<thead>
<tr>
<th>LD50 (oral-rat) mg/kg:</th>
<th>STEL:</th>
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<tbody>
<tr>
<td>LC50 (rat) mg/kg:</td>
<td>Odour Threshold:</td>
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<tr>
<td>Permissible Exposure Limit:</td>
<td>1.5 mg/m3, skin</td>
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<td>TLV (ACGIH):</td>
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</tbody>
</table>

6. PREVENTIVE MEASURES

Personal Protective Equipment: Workers should be supplied with protective clothing that is laundered at regular intervals. Wear appropriate eye protection and protective clothing to prevent skin and eye contact.
Handling: All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.
Storage: Store at only in permanent magazine. This high explosive should be kept well away from initiator explosives, protected from physical damage, separated from oxidizing materials, combustibles and sources of heat.

Precautions:

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media:
Special Procedure:
Unusual Hazards:

EXPOSURE: First Aid Measures:
Inhalation: Leave the contaminated area; take deep breaths of fresh air. If symptoms develop,
call a physician

**Skin:** Flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, call a physician

**Eyes:** First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center.

**Ingestion:** Do not induce vomiting. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and call a hospital

**Antidotes / Dosages:**

**SPILLS**:

**Steps To Be Taken**

- Keep sparks, flames, and other sources of ignition away. Keep material wet. Wet spilled material before picking it up. Do not attempt to sweep up dry material.

**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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