

MATERIAL SAFETY DATA SHEET

2-NITRO TOLUENE 99%

(For Synthesis)

(Ortho Nitro Toluene)

MSDS CAS: 88-72-2

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name: 2-NITRO TOLUENE

CAS#: 88-72-2

Synonym: O-nitro toluene, 1-Methyl-2-nitrobenzene

Chemical Name: 2-Nitro Toluene

Chemical Formula: C₇H₇NO₂

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet :

Company identification: OXFORD LAB FINE CHEM LLP
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
2-Nitro Toluene	88-72-2	100

Section 3: Hazards Identification

Risk advice to man and the environment:

May cause cancer. May cause heritable genetic damage. Also harmful if swallowed. Possible risk of impaired fertility. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 4: First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled:

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire and Explosion Data

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Handling:

Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

Storage:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection: Face shield and safety glasses.

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Section 9: Physical and Chemical Properties

Appearance Form	: clear, liquid
Molecular Weight	: 137.14 g/mole
Colour	: yellow
pH	: No data available

Section 9: Physical and Chemical Properties (Continued)

Melting point	: -4 - -3 °C - lit.
Boiling point	: 225 °C - lit.
Flash point	: 95 °C - closed cup
Ignition temperature	: 305 °C
Lower explosion limit	: 2,2 %(V)
Density	: 1,163 g/mL at 25 °C
Water solubility	: No data available
Relative vapour Density	: 4,73 - (Air = 1.0)

Section 10: Stability and Reactivity Data

Storage stability: Stable under recommended storage conditions.

Materials to avoid: Oxidizing agents, Strong bases

Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x)

Section 11: Toxicological Information

Acute toxicity: LD50 Oral - rat - 891 mg/kg

Irritation and corrosion: No data available

Sensitisation: No data available

Chronic exposure:

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Nitrotoluene)

3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Nitrotoluene)

May alter genetic material.

Signs and Symptoms of Exposure: Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 11: Toxicological Information (Continued)

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

Target Organs Male reproductive system., Female reproductive system., Kidney, Spleen., Liver

Section 12: Ecological Information

Elimination information (persistence and degradability): No data available

Ecotoxicity effects: Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 5,4 mg/l - 48 h

Further information on ecology: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13: Disposal Considerations

Product: Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name: NITROTOLUENES, LIQUID

UN N°: 1664

H.I. nr: 60

ADR - Class: 6.1

Labelling - Transport: 6.1 : Toxic substances.

ADR - Group: II

Section 14: Transport Information (Continued)

Sea transport (IMDG) [English only]

Proper shipping name: NITROTOLUENES, LIQUID

UN N°: 1664

IMO-IMDG - Class or division: 6.1 : Toxic substances.

IMO-IMDG - Packing group: II

Air transport (ICAO-IATA) [English only]

Proper shipping name: NITROTOLUENES, LIQUID

UN N°: 1664

IATA - Class or division: 6.1 : Toxic substances.

IATA - Packing group: II

Section 15: Other Regulatory Information

Labelling according to EC Directives

EC Label

Hazard symbols

T Toxic

N Dangerous for the environment.

R-phrases(s):

R45 May cause cancer.

R46 May cause heritable genetic damage.

R22 Also harmful if swallowed.

R62 Possible risk of impaired fertility.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s):

S53 Avoid exposure - obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets. Restricted to professional users.

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Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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