

<b>Material Safety Data Sheet</b>	<b>4-Nitro-o-xylene</b>
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<b>1 Product And Company Identification :</b>	
Product Name	: 4-Nitro-o-xylene
Other/Generic Names	: 1,2-Dimethyl-4-Nitrobenzene 3,4-Dimethylnitrobenzene 4-Nitro-1,2-Dimethylbenzene 4-Nitro-O-Xylene 1,2-dimethyl-4-nitro-benzen 3,4-Dimethyl-1-nitrobenzene 4-nitro-o-xylen o-Xylene, 4-nitropara- Nitro-ortho-xylene
CAS No.	: <b>99-51-4</b>
Product use	: 4-NOX is versatile intermediate in organic synthesis of Michael addition, Reduction, Henry Reaction (Nitro-aldol reaction) Nef reaction, O-Alkylation, Cycloaddition, Substitution, Elimination, Conversion reaction, Alkylation, Acylation, and Halogenation
Supplier	Deepak Nitrite Ltd. Aaditya-I, National Highway No. 8, Chhani Road, Vadodara - 390 024, India Manufacturing facilities at : Vadodara, Roha, Taloja & Hyderabad. Contact no. : +91-9904406400
For Chemical Emergency	Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887

<b>2 Hazard Identification :</b>	
<b>GHS classification (Classification according to Regulation (EC) No 1272/2008)</b>	<b>Hazard statement (s)</b>
Health Hazards : 0 Flammability: 1 Physical hazards: 0	H302: Harmful if swallowed.
<b>EC classification (Classification according to Directive 67/548/EEC)</b>	
T: R 20/21/22 R36/37/38 R23/24/25	Harmful by inhalation, in contact with skin and if swallowed Irritating to eyes, respiratory system and skin Toxic by inhalation, in contact with skin and if swallowed WGK 2 water endangering
<b>Hazard pictograms</b>	



Signal word

Warning

### 3 Composition / Information On Ingredients :

<b>Chemical formula</b>	: C <sub>8</sub> H <sub>9</sub> NO <sub>2</sub>
<b>Common Name</b>	: 4-NOX
<b>Synonyms</b>	: 1,2-Dimethyl-4-Nitrobenzene 3,4-Dimethylnitrobenzene 4-Nitro-1,2-Dimethylbenzene 4-Nitro-O-Xylene 1,2-dimethyl-4-nitro-benzen 3,4-Dimethyl-1-nitrobenzene 4-nitro-o-xylen o-Xylene, 4-nitropara- Nitro-ortho-xylene
<b>Molecular weight</b>	: 151.16 g/mol
<b>CAS No.</b>	: 99-51-4
<b>Index No.</b>	: -
<b>UN No.</b>	: 1665
<b>EINECS No.</b>	: 202-761-6

### 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.

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### 5 Fire Fighting Measures:

#### **Flammable properties**

Flash point 113 °C (235 °F) - closed cup

#### **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.

### 6 Accidental Release Measures :

#### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

#### **Environmental precautions**

Do not let product enter drains.

#### **Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

### 7 Handling & Storage :

#### **Handling**

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### **Storage**

Keep container tightly closed in a dry and well-ventilated place.

### 8 Exposure Control / Personal Protection :

#### **Personal protective equipment**

Contains no substances with occupational exposure limit values.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Hand protection**

For prolonged or repeated contact use protective gloves.

#### **Eye protection**

Face shield and safety glasses

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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### 9 Physical And Chemical Properties :

Appearance	: solid
Colour	: Dark yellow to greenish
Odour	: Pungent
pH ( 1% Solution)	: -
Boiling Point/range	: 254 °C
Melting point	: 30.5 - 32 °C
Flash Point	: 113 °C (235 °F) - closed cup
Autoignition temperature	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour Pressure	: No data available
Density	: 1.136 g/cm <sup>3</sup> (20 °C)
Solubility water	: 0.1 g/l (25 °C)

### 10 Stability And Reactivity :

#### **Storage stability:**

Stable under recommended storage conditions.

#### **Materials to avoid**

Strong oxidizing agents, Strong bases, Strong reducing agents

#### **Condition to avoid**

Incompatible materials.

#### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

### 11 Toxicological Information :

<b>Acute toxicity</b>	: LD <sub>50</sub> /oral / rat 1690 mg/kg
<b>RTECS#</b>	: CAS# 99-51-4 unlisted.
<b>Category of danger</b>	: harmful
<b>Carcinogenicity</b>	: CAS# 99-51-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
<b>Storage class</b>	: 10 - 13 Other liquids and solids
<b>Potential health effects</b>	: <b>Inhalation</b> May be harmful if inhaled. May cause respiratory tract irritation. <b>Skin</b> May be harmful if absorbed through skin. May cause skin irritation. <b>Eyes</b> May cause eye irritation. <b>Ingestion</b> May be harmful if swallowed.

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### 12 Ecological Information :

Acute fish toxicity LC<sub>50</sub> : LC<sub>50</sub> - Daphnia magna (Water flea) - 16 mg/l - 48 h

Acute toxicity to aquatic invertebrates EC<sub>50</sub> : WGK 2 water endangering

### 13 Disposal Considerations :

#### Product

Observe all federal, state, and local environmental regulations.

#### Packaging

Dispose of as unused product.

### 14 Transport Information :

**UN No. : 1665**

**Hazard Class : 6.1**

**Packing Group : II**

Proper shipping name : Nitroxylenes, liquid or solid

Declaration for land shipment : Nitroxylenes, liquid or solid UN1665 Hazard Class: 6.1 Packing Group: II

Declaration (transport by sea) IMDG-Code UN 1665 NITROXYLENES, SOLID, LIQUID 6.1, II

Declaration (transport by air) IATA-DGR UN 1665 NITROXYLENES, SOLID, 6.1, II

### 15 Regulatory Information :

#### Safety Information according to GHS

**Hazard Statement (s)** : H302: Harmful if swallowed.

**Precautionary Statement (s)** : -

**Signal Word** : Warning

#### Hazard Pictogram(s):



**RTECS#** : CAS# 99-51-4 unlisted.

#### Labeling according to EC directives

**Hazard symbols** : Xn, T

**Risk phrases** : R20/21/22:Harmful by inhalation, in contact with skin and if swallowed .  
R36/37/38: Irritating to eyes, respiratory system and skin .  
R23/24/25:Toxic by inhalation, in contact with skin and if swallowed .

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**Safety phrases** : S22:Do not breathe dust .  
S36/37:Wear suitable protective clothing and gloves .  
S45:In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) .  
S36/37/39:Wear suitable protective clothing, gloves and eye/face protection .  
S26:In case of contact with eyes, rinse immediately with plenty of water and seek medical advice .  
S13:Keep away from food, drink and animal feeding stuffs.

### **DSL Status**

This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list. 4-Nitro-o-xylene CAS-No. 99-51-4

### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### **SARA 311/312 Hazards**

No SARA Hazards

### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## **16 Other Information:**

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