



Technical Data Sheet

2, 6-Nitroxylene

1- Introduction

2, 6-nitro xylene is a yellow coloured, clear liquid with characteristic odour. It is almost insoluble in water. It is stable under recommended storage conditions & decomposes on heating producing toxic fumes (nitrogen oxides). Keep away from oxidizing agents & ignition sources.

Product Name: - 2, 6-nitro xylene

Synonyms: - 1, 3-Dimethyl-2-nitrobenzene, 2, 6-Dimethylnitrobenzene, 2-Nitro-1, 3-dimethylbenzene, 2-Nitro-1, 3-xylene, 2-Nitro-m- xylene

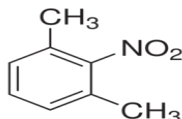
CAS No. 81-20-9

UN No. 1665

EINECS No. : 201-333-6

Mol. Formula: - $C_8H_9NO_2$

Structural Formula:-



Mol. Weight: - 151.16



2- Physical Properties:

Sr. No.	Properties	2, 6-nitro xylene
1-	Appearance	Clear liquid.
2-	Colour	Yellow colour.
3-	Odour	Characteristic odour.
4-	pH(1%Solution)	Data not available
5-	Boiling Point/range	225 °C at 744mm Hg
6-	Melting point	14.0 – 16.0 °C
6-	Flash Point	87 °C (188.6 °F)
7-	Auto ignition temperature	Not available
8-	Vapor Pressure	0.14 (25 °C)
9-	Density	1.112 g/cm ³ (20 °C)
10-	Solubility water	Negligible
11-	Decomposition	Decomposes on heating producing toxic fumes (Nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen)



3. Product Quality Specification:

Sr. No.	Test Parameter	Specification
1-	Appearance	Yellowish colour, clear liquid.
2-	Purity (by GC)	99.5 % min
3-	2,4 nitro xylene	0.20 % max.
4-	Moisture (KF)	0.20 % max.

4. Packing Information:

Sr. Number	Grade	Packing	Secondary Packing
1-	200 Kg in MS drum/ Tanker	200 kg of 2, 6-nitro xylene packed in MS or in tanker.	-----

DNL can customize packing for different quantities.

5. PRODUCT USES :

The nitrogen ion in nitro compounds is trigonally planar with 120° angles. There are two resonance bonds so that the two oxygens are equivalent. Nitro compounds are strongly basic due to electron withdrawing both inductively and mesomerically. Historically, they are abundant in dyes and explosives. Nitro compounds, organic hydrocarbons having one or more NO₂ groups bonded via nitrogen to the carbon framework, are versatile intermediate in organic synthesis.

- Michael addition
- Reduction
- Henry Reaction (Nitro-aldol reaction)
- Nef reaction
- O-Alkylation
- Cycloaddition
- Substitution, Elimination, Conversion reaction



- Alkylation, Acylation, and Halogenation

Nitro compounds are readily reduced into amines when reacted with hydrochloric acid. Aromatic nitro compounds also yield anilines, aromatic amine compounds. Nitro compounds are cleaved into two parts by the addition of a molecule of water to produce carbonyl compounds (aldehydes or ketones). Aromatic nitro compounds undergo nucleophilic substitutions to be replaced by the hydroxide anion, resulting in the creation of phenol compounds and by alkoxy nucleophiles to corresponding ethers.

1- In dyes and explosives chemicals manufacturing: -

It is used as an intermediate for manufacturing of dyes and explosives chemicals.

2- In agriculture: -

It is used as an intermediate for manufacturing of Agrochemicals.

3- In pharmaceutical :-

It is used as an intermediate for manufacturing of pharmaceutical products.

6. Regulatory Information:-

Particulars	Information	Pictogram
Hazard Class	6.1	
Label	Warning	
Subsidiary Label	Aquatic toxic	
UN Number	1665	
Proper shipping Name	2, 6-nitro xylene	
Packing Group	II	

RTECS#: ZE4686000



7. PRODUCT SAFETY INFORMATION:

2, 6-nitro xylene may irritate skin and eye. If inhaled may cause respiratory tract irritation & may be harmful if swallowed. It is stable under recommended storage conditions. Materials keep away from strong oxidizing agents & strong bases. Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x). Stable under recommended storage conditions. Materials Separated from oxidizing agents. As with any chemical, 2, 6-nitro xylene requires care in handling. Anyone responsible for the procurement, use or disposal of this product should familiarize himself and those handling the product with the appropriate safety and handling precautions. This information is available in the Material Safety Data Sheet, which may be obtained by contacting our representative.

8. Manufacture Site:

Deepak Nitrite Limited (APL Division)
Plot No. 1 to 6, 26 to 31, MIDC Industrial Area, Dhatav, Roha,
Dist. Raigad 402 116, Maharashtra.
Phone No. 02194 263550/263750

9. Corporate Headquarter:

Deepak Nitrite Ltd.
Aaditya-I, National Highway No. 8, Chhani Road,
Vadodara - 390 024,
India
Ph. No (0265) 2765200

10. 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



Disclaimer:

The information published in this Technical Data Sheet has been compiled with the basic objective of selling and use of 2, 6-nitro xylene that meet basic quality requirements. Information presented herein has been considered to be accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. The information is provided without any representation of warranty, expressed or implied, regarding the accuracy or correctness. It is the user's responsibility to determine the accuracy or suitability of this information. Deepak Nitrite assume no responsibility for the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use. Adoption of necessary safety precautions, for any intended usage, shall remain the user's responsibility.

Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment. Deepak Nitrite assumes no responsibility for injury to user or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the Material Safety Data Sheet. Additionally, Deepak Nitrite assumes no responsibility for injury to user or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. The conditions or methods of handling, storage, and / or use of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, and / or use of this product.

All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry.

Deepak Nitrite Ltd

