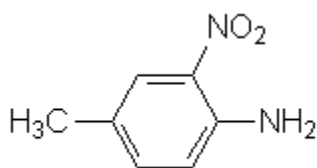


1. General Statements

2-Nitro-p-Toluidine is crystalline solid, characteristic odour which is orange in colour. Combustible substance, poorly flammable. Slightly soluble in water. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment.

2. Chemical identification.

Name : 2-Nitro-p-Toluidine
CAS number(s) : 89-62-3
EC number : 201-924-9
Molecular formula : C₇H₈N₂O₂
Structure :



3. Uses and Benefits

It is used as an intermediate in the synthesis of azo dyes and pigments. Because of its aromatic amine structure, it can undergo coupling reactions to form colorful compounds used in textile, ink, and paint industries.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	Light red
Odour :	Odourless
pH :	6.93 at 24°C
Melting point :	111 °C at 955 hPa atm
Boiling point :	302.9 °C at 101 325 Pa
Flash point :	120.95 °C at 101 325 Pa
Density :	1.5 g/cm ³ at 23 °C
Solubility in Water:	Poorly soluble in water.

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Toxic if inhaled. Harmful if inhaled.Harmful if swallowed.
Irritation / corrosion Skin / eye/ respiratory tract	May cause an allergic skin reaction
Respiratory or skin sensitisation	Toxic if inhaled.
Toxicity after repeated exposure Oral / inhalation / dermal	May cause damage to organs through prolonged or repeated exposure.
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	Yes
Fate and behavior	Result
Persistence and degradability	Not readily biodegradable in water.
Bioaccumulative potential	Bioaccumable.

7. Exposure

Human health

2-Nitro-p-Toluidine is a symptom that obstructs oxygen absorption. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.Caution! Substance is absorbed through the skin.. Harmful if inhaled.Harmful in contact with skin. May cause an allergic skin reaction.None under normal conditions. Dust from this product may cause eye irritation.Harmful if swallowed.The exposure must be kept as minimum as possible by the use of appropriate risk management measures suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals.Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment:

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

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8. Risk Management Recommendations

Human health measures.

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitable protective clothing
	Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Engineering controls	Ensure good ventilation of the work station..	
Environment protective measures		
Avoid release to the environment		

9. First-aid measures

First-aid measures after inhalation : Remove the person to fresh air and keep them comfortable for breathing. Take medical advice.

First-aid measures after skin contact :Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam.

Unsuitable extinguishing media : Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : On heating/burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

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Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter a fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment : Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Dust cloud production: dust-tight suit (EN 13982).

Environmental precautions : Avoid release to the environment.

For containment : Collect spillage.

12. Disposal consideration

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin or on clothing. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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14. Classification and Labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H317 - May cause an allergic skin reaction
H331 - Toxic if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS US)

: P260 - Do not breathe dust, fume, gas, mist, vapours, spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P311 - Call a poison center or doctor.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice or attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

15. Conclusion

2-Nitro-p-Toluidine is crystalline solid, characteristic odour which is orange in colour. Combustible substance, poorly flammable. Slightly soluble in water. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment. There is a risk of a dust explosion if the following conditions are met the substance is given in very finely distributed form (powder, dust). The substance is whirled up in sufficient quantity in the air. An ignition source is present (flame, spark, electrostatic discharge, etc.) The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

Manufacturer

Aarti Industries Limited

Udyog Kshetra, 2nd Floor, Mulund Goregaon Link Road, Mulund (West)

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2-Nitro-p-Toluidine

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This GPS safety summary is intended to give general information about the health, safety and environment and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.