

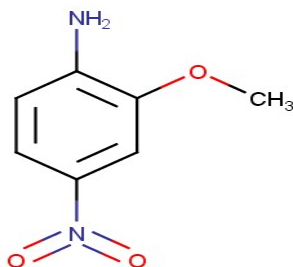
Reference number: AIL-GPS-010 Issue date : 15/10/2021 Revision date: 07/03/2024 Version: 1.1

1. General Statement

2-Methoxy-4-nitroaniline is an organic substance. It appears in Powder form & Light yellow in colour, Insoluble in water, Soluble in ethanol, ether & in acetone.it has Characteristic odour.

2. Chemical identity

Name : 2-methoxy-4-nitroaniline
 CAS number(s) : 97-52-9
 EC number : 202-588-6
 Molecular formula : C₇H₈N₂O₃
 Structure :



3. Uses and Benefits

2-Methoxy-4-nitroaniline has applications in dyeing textiles such as cotton and is a chromogenic agent in printing. It is mainly used as an intermediate in the manufacture of Pigment Yellow.2-Methoxy-4-nitroaniline is used in dyeing textiles such as cotton, as a dye in the printing industry, and as an intermediate in the synthesis of azo dyes that have applications in tattoo inks, emulsion paints, and toy enamels.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	Light yellow.
Odour :	Characteristic odour.
pH :	5 – 6 (0.01 %)
Melting point	139 °C
Boiling point :	Not applicable (decomposes)
Flash point :	No data available
Density :	1.45 23°C (Relative Density)
Solubility of Water:	0.01 g/100ml

GPS Safety Summary

2-methoxy-4-nitroaniline

5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Harmful if swallowed.
Irritation / corrosion Skin / eye/ respiratory tract	No
Respiratory or skin sensitisation	No
Toxicity after repeated exposure Oral / inhalation / dermal	No
Genotoxicity / Mutagenicity	No
Carcinogenicity	Suspected of causing cancer.
Toxicity for reproduction	No

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	Yes
Fate and behavior	Result
Persistence and degradability	Not readily biodegradable in water.
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

7. Exposure

Human health

The substance Suspected to cause cancer. In chemical handling operations, the manual transfer of powder from bulk containers to smaller process containers can generate significant amounts of dust. Workers in powder handling operations are often poorly protected from dust exposures.

The most likely route of human exposure (workers) is through skin. In industrial settings, ingestion is not an anticipated route of exposure.

Workers may be exposed during (un)loading, mixing, sampling, analysis or maintenance operations and particularly in case of batch processes. 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.

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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

Human exposure to 2-methoxy-4-nitroaniline may occur from its release into the environment during the manufacture, use, and disposal of this product and products made from this compound

Substance is very toxic to aquatic life with long lasting effects. 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.

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:	Wear an appropriate mask. Self-contained breathing apparatus,Dust production: dust mask with filter type P2
Engineering controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.Ensure good ventilation of the work station.	
Environment protective measures		
Product must not be released into water without pre-treatment.		

9. First-aid measures

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse with water. Take the victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take the victim to an ophthalmologist if irritation persists.

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First-aid measures after ingestion : Rinse mouth with water. Call Poison Information Centre. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Class A foam extinguisher. Water (quick-acting extinguisher, reel).

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).

Advice for firefighters

Precautionary measures fire : Evacuate area. Eliminate all ignition sources if safe to do so. Keep the container closed when not in use.

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

11. Accidental release measures

Protective equipment : Wear recommended personal protective equipment. Use self-contained breathing apparatus and chemically protective clothing,

Environmental precautions: Prevent soil and water pollution. Prevent spreading in sewers.

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust clouds with water spray. Powdered form: no compressed air for pumping over spills.

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 : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

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13. Handling and storage

Precautions for safe handling : Avoid raising dust. Keep away from naked flames/heat. In a finely divided state: use spark /explosion proof appliances. Finely divided: keep away from ignition sources/sparks. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Powdered form: no compressed air for pumping over. Keep the container tightly closed.

Hygiene measures : Always wash hands after handling the product. Remove contaminated clothes. Wear personal protective equipment. Observe strict hygiene.

14. Classification and Labeling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements (CLP)

: P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P312 - IF SWALLOWED: Call doctor, a POISON CENTER if you feel unwell.

15. Conclusion

It appears in Powder form & Light yellow in colour. The substance to cause cancer. Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. 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

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2-methoxy-4-nitroaniline

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This GPS safety summary is intended to give general information about the health, safety and environmental 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.

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