

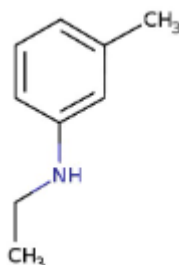
1. General Statement

N-ethyl-m-toluidine pale yellow-brown liquid faint yellow odour

Combustible substance, poorly flammable (flash point > 60 up to 93 °C). Vapours may form explosive mixtures with air when the substance is heated above its flash point. Slightly soluble in water. Low or very low-volatile. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment.

2. Chemical identity

Name : N-ethyl-m-toluidine
 CAS number(s) : 102-27-2
 EC number : 203-019-4
 Molecular formula : C₉H₁₃N
 Structure :



3. Uses and Benefits

N-ethyl-m-toluidine is used for the manufacture of chemicals. It is also used as an intermediate step in further manufacturing of another substance (use of intermediates).

4. Physical / chemical properties

Property	Value
Physical state :	Liquid
Colour :	Pale yellow to brown
Odour :	Faint odour.
pH :	No data available
Melting point	< -50 °C Atm. press: 101 325 Pa

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Boiling point :	228 °C Atm. press :101 325 Pa
Flash point :	99 °C
Density :	0.94 g/cm ³ (20 °C)
Solubility in Water:	1.131 g/l (20 °C)

5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Toxic if swallowed.Toxic in contact with skin.Toxic if inhaled.
Irritation / corrosion Skin / eye/ respiratory tract	Causes skin irritation.Causes serious eye irritation.May cause respiratory irritation.
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	May cause respiratory irritation.
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 rapidly degradable.
Bioaccumulative potential	No additional information available

7. Exposure

Human health

The substance Toxic if swallowed.Toxic in contact with skin.Toxic if inhaled.it also Causes skin irritation.Causes serious eye irritation.May cause respiratory irritation.

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Prophylaxis offer: Occupational medical prevention has to be offered when, conducting activities with this substance, an exposure cannot be excluded.

Obligatory prophylaxis: The employer shall arrange occupational medical prophylaxis if, exerting activities with this substance, skin contact cannot be excluded

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. 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.

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 inadequate ventilation] wear respiratory protection.
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 person to fresh air and keep comfortable for breathing. Take medical advice.

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First-aid measures after skin contact :Wash skin with plenty of water. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a physician immediately.

10. Fire-fighting measures

Extinguishing media

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

Unsuitable extinguishing media :Do not use a heavy water stream.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

Advice for firefighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so. Keep the container closed when not in use. Keep the container tightly closed and away from heat, sparks and flame.

Firefighting instructions : Eliminate all ignition sources if safe to do so. Do not enter a fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment :Protective clothing. Protective goggles. Safety glasses. Wear recommended personal protective equipment.

Environmental precautions: Avoid release to the environment.

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks without risks if possible.

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

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

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

14. Classification and Labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary statements (GHS US)

: P261 - Avoid breathing 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.

P280 - Wear protective gloves.

P301+P310 - If swallowed: Immediately call a poison center or doctor.

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P311 - Call a poison center or doctor.

P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice or attention.

P337+P313 - If eye irritation persists: Get medical advice or attention.

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.

P362+P364 - Take off contaminated clothing and wash it before reuse.

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

N-ethyl-m-toluidine is a pale yellow to brown liquid and toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Combustible substance, poorly flammable (flash point > 60 up to 93 °C). Vapours may form explosive mixtures with air when the substance is heated above its flash point. Slightly soluble in water. Low or very low-volatile. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment. 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

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Manufacturer

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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.