



Safety Data Sheet

1. Identification

Product name	N-Ethyl-o-toluidine
Product code	EoT
Manufacturer name	Mitsuboshi Chemical Co., Ltd.
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Contact	Development and Technical Division
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2. Hazards identification

GHS classification	
Physical hazards	
Flammable liquid	Category 4
Environmental hazards	
Aquatic hazard short term	Category 3
Aquatic hazard long term	Category 3
GHS label elements	
Pictograms and hazard symbol	No symbol
Signal word	Warning
Hazard statements	Flammable liquid Toxic to aquatic life with long-lasting effects
Precautionary statement	
Prevention	Keep away from flames and hot surfaces. –No smoking. Avoid release to the environment. Wear protective gloves, eye protection, face protection.
First aid measures	In case of fire: Use appropriate fire extinguisher to extinguish. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.
Disposal	Dispose of contents / container by a special waste disposal contractor who received permission from the local governor.

3. Composition/Information on**Ingredients**

Substance/ Mixture	Substance
Components	N-Ethyl-2-methylaniline
Synonyms	N-Ethyl-o-toluidine N-Ethyl-2-methylbenzeneamine
Concentration	≥ 99.0%
CAS number	94-68-8

4. First aid measures	
If inhaled	Call a doctor, if you feel unwell.
If on skin	Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
If in eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If swallowed	Call a doctor, if you feel unwell. Rinse mouth.
5. Fire-fighting measures	
Extinguishing Media	Foam fire extinguisher, Powder fire extinguisher, Carbon dioxide fire extinguisher, Sand
Inappropriate fire extinguisher	Concentrated water jet
Specific hazard	Irritative or toxic fume and gases are generated in a fire. The gas that contains CO and NOx may be generated.
Specific fire extinguishing method	Stop the supply of the combustible material, and extinguish the fire by appropriate fire extinguisher. Cool the neighbouring tanks and architectures by water spray to prevent the expansion of fire. Fire extinguishing activities should be done on the windward side of the fire. Prohibit the entry of non-essential personnel to the area of fire. Move the container away from the fire zone if it is not dangerous to do so.
Protective equipment and precautions for fire fighters	Wear appropriate self-contained breathing apparatus and chemical resistant protective clothing that can protect eyes and skin.
6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Workers should wear appropriate protective equipment, and should avoid contact with eyes and skin, and inhalation of gas. Prohibit the entry of non-essential personnel.
Environmental precautions	Prevent leaked substances from entering surface and ground water in order to avoid impact on the environment.
Containment and clean-up methods and materials	Promptly remove all the ignition sources. (Prohibit smoking and fireworks in the neighbouring area) Collect spillage to metal- or glass-made container as possible. Move the residual liquid to the safe place by absorption to sand or unreactive absorbent.
7. Handling and storage	
Handling	
Engineering control	Carry out the measures described in "8. Exposure controls/personal protection" and wear protective equipment.
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/ sparks /open flames/ hot surfaces. No

Avoidance of contact	smoking.
Storage	Avoid breathing dust/ fume/ gas/mist/ vapors/ spray. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well- ventilated area. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wear respiratory protection. Wash contaminated clothing before reuse. Please refer to "10. Stability and reactivity".
Storage condition	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep away from strong oxidizing reagents, food, and feed. Ventilate along floor. Store in a place that have no access to drain tube or sewer pipe.
Container and packaging materials	Use a container specified in the Fire Service Law or United Nations transportation regulations.

8. Exposure control/ Personal protection

Control concentration	No setting
Threshold limit value	
Japan Society for Occupational Health	No setting
ACGIH	No setting
Facility controls	In the place where the substance is stored and used, provide facilities for eye-washing and a shower for washing the entire body. Install ventilation equipment.
Personnel protective equipment	
Respiratory protection	Wear appropriate protective respiratory equipment as possible.
Hand protection	Wear appropriate protective gloves.
Eye protection	Wear appropriate eye protection.
Skin and body protection	Wear appropriate protective clothing and face protection.

9. Physical and chemical properties

Physical state, appearance	Liquid (20°C, 1atm)
Color	Pale yellow or pale brown
Odor	Peculiar odor
Melting point	< -15°C(GESTIS)
Boiling point	218°C(GESTIS)

Flammability	Yes
Explosion limit	
Upper limit	5.9 vol. %
Lower limit	1.2 vol. %
Flash point	89°C (Closed cup, our company's data)
Auto-ignition temperature	445°C
Decomposition temp.	No data
pH	No data
Kinematic viscosity	No data
Solubility	Very slightly soluble in water Soluble in alcohol, ether, and aqueous solution of HCl.
Partition coefficient :octanol/ water	2.48(25°C)(GESTIS)
Evaporation rate (Butyl acetate = 1)	No data
Vapor pressure	1 hPa(20°C)(GESTIS)
Density	0.94
Relative vapor density(air= 1)	4.67(GESTIS)
Particle characteristics	Not applicable

10. Stability and reactivity

Reactivity	No data
Chemical stability	Stable for normal use and storage.
Conditions to avoid	Contact with open- flame, high temperature, incompatible substances.
Incompatible substance	Oxidizer, strong acid, especially nitric acid
Hazardous decomposition products	Heating causes combustion, harmful fume gas is produced.

11. Toxicological information

Acute toxicity	
Oral	LD50=2400mg/kg (Rat).
Dermal	No data
Inhalation(vapor)	Exposure of the saturated vapor (0.722mg/L) of this compound to rats did not cause the death of them (IUCLID 2000). But that is not sufficient data to evaluate.
Inhalation(mist)	No data
Skin corrosion/irritation	The test using rabbits indicated "not irritating" (IUCLID2000) .
Serious eye damage/eye irritation	The test using rabbits indicated "not irritating" (IUCLID2000) .
Respiratory sensitization	No data
Skin sensitization	No data
Germ sell mutagenicity	No data
Carcinogenicity	No data
Reproduction toxicity	No data
Specific target organ toxicity	No data

(single exposure)	
Specific target organ toxicity	No data
(Repeated exposure)	
Aspiration hazard	No data
12. Ecological information	
Hazard to the aquatic	
Acute hazard	EC50 (Daphnia magna):25.6mg/L/8(48hr) (IUCLID2000) .
Chronic hazard	No data
Hazard to the ozone layer	No data
mobility	
13. Disposal consideration	
Residual waste	For disposal, follow relevant regulations and local authority standards. Dispose of contents / container by a special waste disposal contractor who received permission from the local governor. When consigning waste to a contractor, be sure to provide sufficient notice of hazards and toxicity.
Contaminated packaging	Containers should be cleaned and recycled, or appropriate disposal according to relevant laws and local government standards. When empty containers are discarded, contents should be completely removed.
14. Transport information	
International regulations	
UN number	2754
Proper shipping name	N-ETHYLTOLUIDINES
Class	6.1
Packing groupe	II
Marine pollutant	Not applicable
Domestic regulations	Regulations on transport in your region should be checked by your own responsibility.
15. Regulatory information	
Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.	
16. Other information	
References	The original data are indicated in each item.

Disclaimer

The content of this SDS was prepared based on currently available materials, and the data and evaluations are not necessarily full and complete, therefore the content must be treated with caution. Moreover, the precautions shown here are for normal handling of the product. If you intend to use the product for special purposes, additional safety measures appropriate to the application and usage may be required.