

**Safety Data Sheet****1. Identification**

Product name	N-Ethylaniline
Product code	EA
Manufacture name	Mitsuboshi Chemical Co., Ltd.
Address	14 Kitanoharacho, Kamigamo Kita-ku Kyoto, 603-8006, Japan
Contact	Development and Technical Division
Telephone number	075-781-1177
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2. Hazards identification

GHS classification

Physical hazards

Flammable liquid	Category 4
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Health hazards

Acute toxicity (oral)	Category 4
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Acute toxicity (dermal)	Category 5
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Skin corrosion-stimulant	Category 2
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Serious eye damage /eye-irritation	Category 2A
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Specific target organ toxicity (single exposure)	Category 1(blood)
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Specific target organ toxicity (repeated exposure)	Category 1(blood)
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Environmental hazards

Aquatic environmental toxicity (acute)	Category 2
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Aquatic environmental toxicity (chronic)	Category 2
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GHS label elements

Pictograms and hazard symbol	
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Signal word	Danger
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Hazard statement	Combustible liquid Harmful if swallowed May be harmful in contact with skin Causes skin irritation Causes serious eye irritation Causes damage to organ (blood system) Cause damage to organs through prolonged or repeated exposure (blood system)
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Precautionary statement	Toxic to aquatic life with long lasting effects.
Safety measure	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid release to the environment.
First aid	In case of fire: Use for extinction: CO ₂ , powder or water spray. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/ container to an approved waste disposal plant.

3. Composition / Information on

Ingredients

Substance/ Mixture	Substance
Component name	N-Ethylaniline
Other names	N-Ethylaminobenzene N-Ethyl-phenyl amine
Molecular formula	C ₈ H ₁₁ N
CAS number	103-69-5
Content	≥99.0%

4. First-aid measures

If inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/ attention if you feel unwell. Get medical advice/attention.
If on skin	Take off immediately all contaminated clothing.

	Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation or a rash occurs: Get medical advice/attention. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse
If in eyes	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.
If swallowed	Immediately call a POISON CENTER/doctor. Rinse mouth. Get medical advice/attention if you feel unwell.

5. Fire-fighting measures

Extinguishing Media	Water spray, Foam fire extinguisher, Extinguishing powder, Carbon dioxide
Inappropriate fire extinguisher	Water splash
Specific hazard	In the case of a fire hazardous substances can be released.
Specific fire extinguishing method	Cool surrounding containers with water spray. If possible, take container out of dangerous zone. Heating causes a rise in pressure, risk of bursting and explosion. Shut off sources of ignition.
Protective equipment	Wear self-contained breathing apparatus and special tightly sealed suit.

6. Accidental release measures

Emergency measures	Wear suitable protective wear and avoid contact and breathing fume /gas /mist / spray (see chapter “8.Exposure control/Personal Protection”). Afterwards ventilate area and wash spill site.
Precautions for environment	Avoid release to the environment.
Containment and purification method/equipment	Absorb any spilt liquid with an absorbent (e.g. diatomite, vermiculite, sand) and dispose of according to regulations
Prevention of secondary disasters	Shut off sources of ignition.

7. Handling and storage

Handling	
Engineering control	Carry out the measures described in “8. Exposure controls /personal protection” and wear protective equipment.
Ventilation	Good ventilation system is necessary in the working area.
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 smoking. Avoid breathing dust/ fume/ gas/mist/ vapors/ spray. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product.

Avoidance of contact	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. Refer to the section "10. Stability and Reactivity".
Storage	
Storage condition	Keep container tightly closed in a cool, dry and well-ventilated place. Substance is sensitive to light, protect from exposure to light. Substance is sensitive to air, protect from air/oxygen. Refer to Section "10. Stability and reactivity".
Contact prohibited substance	Keep away from flames or heat. Keep away from strong oxidizing agents. Keep away from strong acids.
Condition	Keep container tightly closed in a cool, dry and well-ventilated place. Store locked up.
Container	Store in a container that is suitable for local law.

8. Exposure control / Personal protection

Control concentration	No setting
The limit value	
Japan Society for Occupational Health	No setting
ACGIH	No setting
Equipment	Washing facility at the workplace required. Ventilation system should be equipped in working place.
Personal protection	
Respiratory protection	Wear suitable respiratory protection (e.g. gas filter).
Hand protection	Wear suitable gloves made of fluorocarbon rubber, butyl rubber
Eye protection	Wear glasses with side protection.
Body protection	Depending on the risk, wear a suitable protective clothing or a suitable chemical protection suit.
Hygiene	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling this product.

9. Physical and chemical properties

Physical state	Liquid
Color	pale yellow or pale brown
Odor	Irritating odor like aniline
Melting point	-63.5°C (HSDB)
Boiling point	204.5 °C (HSDB)
Flammability	Yes
Lower/upper explosion limit	1.6~9.5 vol%(in the air) (GESTIS)

Flash point	91°C (our company's data, open cup)
Ignition point	480°C
Decomposition temperature	No data
pH	No data
Viscosity	No data
Solubility	0.24 g/100 ml (25°C) (water) (HSDB)
Partition Coefficient (octanol/water)	Log Pow=2.16 (GESTIS)
Vapor pressure	4*10 ⁻⁴ MPa (ICSC)
Density (密度)	0.96g/ml (20°C)
Vapor density (air=1)	4.2

10. Stability and reactivity

Stability	Stable if stored and handled according to law regulations.
Reactivity	React with strong oxidizing agents, conc.nitric acid. The explosive gas may be generated above 85°C, if mixed with air.
Conditions to avoid	Contact with naked flame.
Substance to avoid contact	Strong oxidizing agents, conc. Nitric acid
Decomposition products	Combustion causes releasing of nitrous gases or aniline etc.

11. Toxicological information

Acute toxicity	
Oral	Category 4 : LD50 Rat 334 mg/kg
Dermal	Category 5 : LD50 Rat 4,700 mg/kg
Skin corrosion / irritation	Category 2 : The symptoms of "red " and "pain" is described in ICSC.
Serious eye damage / eye irritation	Category 2A : From the information of skin corrosion, this product is considered to have irritation to eyes, too.
Specific target organ toxicity (single exposure)	Category 1 (blood) : The substance may cause effects on the blood. The contact may result in the formation of methaemoglobin (ICSC).
Specific target organ toxicity (repeated exposure)	Category 1 (blood) : The substance may cause effects on the blood. The contact may result in the formation of methaemoglobin (ICSC).

12. Ecological information

Hazardous to the aquatic environment (Acute)	Category 2 : 48-hour EC50 = 4.34 mg/L(Daphnia magna)
Hazardous to the aquatic environment (Long-term)	Category 2 : Not rapidly degradable (Non-biodegradable, a degradation rate by BOD: 0% (Biodegradation and Bioconcentration Results of Existing Chemical Substances under the Chemical Substances Control Law, 1977)), and 21-day NOEC = 0.54 mg/L for crustacea (Daphnia magna) (Results of Aquatic Toxicity Tests of Chemicals conducted by Ministry of the Environment in Japan (Ministry of the Environment, 2001), Environmental Risk Assessment for Chemical Substances vol. 6 (Ministry of the Environment,

2008)).

Hazardous to the ozone layer

Classification not possible : No data available.

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 No.

2272

Proper Shipping Name

N-ETHYLANILINE

Class

6.1

Packing Group

III

Marine Pollutant

Applicable

Domestic regulations

Refer to applicable laws and regulations in an imported country.

15. Regulatory information

PRTR(Japan)

Classification : II, Cabinet order No. : 2-9,Cabinet order name : N-Ethylaniline

Poisonous and deleterious substances control act

Classification : deleterious substance (cabinet order), Cabinet order No. : Article 2-1-5 of Cabinet order, cabinet order name : N-Alkylaniline and its salts

Fire service act

Class-4 No.3 petroleum, not water-soluble fluid, dangerous grade 3

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

References

The data origins are described by the side of the information.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling please make adequate countermeasure to maintain your safety.