



---

**Safety Data Sheet**

---

**1. Identification**

|  |   |
|--|---|
| Product name                           | N,N-Dimethyl-p-toluidine  |
| Product code                           | DMpT  |
| Manufacturer name                      | Mitsubishi Chemical Co. Ltd.  |
| Address                                | 14 Kitano-hara-cyo, Kamigamo, Kita-ku, Kyoto, 603-8006,<br>Japan                    |
| Contact                                | Development and Technical Division  |
| Telephone number                       | +81-781-1177  |
| Emergency telephone number             | +81-781-1177  |
| Fax number                             | +81-701-7227  |
| Applications and usage<br>restrictions | Catalysts for polymerization, curing catalysts,<br>plastic cement · adhesive agents |

---

**2. Hazard identification**

## GHS classification

## Physical hazards

Flammable liquid Category 4

## Health hazards

Acute toxicity (oral) Category 4

Acute toxicity (inhalation) Category 4

Carcinogenicity Category 2

Specific target organ toxic-  
ity (single exposure) Category 1(blood), Category 3(narcotic effects)Specific target organ toxic-  
ity (repeated exposure) Category 1(respiratory organ, liver, kidney), Category  
2(blood)

## Environmental hazards

Acute aquatic hazards Category 3

Long term aquatic hazards Category 3

## Label elements

Pictograms or hazards  
symbols

Signal words Danger

Hazard statement  
Combustible liquid. (H227)  
Harmful if swallowed. (H302)  
Harmful if inhaled. (H332)

May cause drowsiness or dizziness. (H336)  
Suspected of causing cancer. (H351)  
Causes damage to organs (blood system). (H370)  
Causes damage to organs through prolonged or repeated exposure. (liver, kidney, and respiratory organs) (H372)  
May cause damage to organs through prolonged or repeated exposure. (blood system) (H373)  
Harmful to aquatic life.(H402)  
Harmful to aquatic life with long-lasting effects. (H412)

#### Precautionary statements

##### Prevention

Obtain special instructions before use. (P201)  
Do not handle until all safety precautions have been read and understood. (P202)  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)  
Do not breathe dust/fume/gas/mist/vapors/spray. (P260)  
Avoid breathing dust/fume/gas/mist/vapors/spray. (P261)  
Wash hands thoroughly after handling. (P264)  
Do not eat, drink or smoke when using this product. (P270)  
Use only outdoors or in a well-ventilated area. (P271)  
Avoid release to the environment. (P273)  
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

##### Response

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. (P301+P312)  
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)  
IF exposed or concerned: Get medical advice/attention. (P308+P313)  
Call a POISON CENTER or doctor/physician if you feel unwell. (P312)  
Rinse mouth. (P330)  
In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray. (P370+P378)

##### Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)  
Store locked up. (P405)

##### Disposal

Dispose of contents and container in accordance with

|                   |   |
|-------------------|---|
|                   | local, regional, national regulations. (P501)     |
| Substance/mixture | Substance   |
| Components        | Substance: N,N-Dimethyl-p-toluidine $\geq 99.0\%$ |
| Synonyms          | N,N,4-Trimethylaniline                            |
| Chemical Formula  | C <sub>9</sub> H <sub>13</sub> N                  |

---

#### 4. First-aid Measures

|                            |  |
|----------------------------|--|
| If inhaled                 | Get medical advice/attention if you feel unwell.<br>If the symptom continues, get medical advice.                    |
| 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 swallowed               | Rinse mouth. Get medical advice/attention.   |
| Protection of first-aiders | Rescuers should wear protective equipment suitable for the situation.  |

---

#### 5. Fire-fighting measures

|   |   |
|---|---|
| Suitable extinguishing media                          | Water spray, dry chemical, foam, CO <sub>2</sub>  |
| Unsuitable extinguishing media                        | Straight stream   |
| Specific hazard arising                               | The possibility to decompose upon combustion or in high temperatures and to generate poisonous fume.  |
| Specific fire extinguishing method                    | Fire-extinguishing work must be done from windward.<br>Shut off sources of ignition.<br>Cool surrounding containers with water spray.<br>Prevent unrelated people from entering the area.<br>Remove the container from the fire area, if not dangerous. |
| Special protective equipment for fire-fighting person | Protection with self-contained breathing apparatus.   |

---

#### 6. Accidental release measure

|  |  |
|--|--|
| Precautions for human-body and protective apparatus and emergency procedures | Prevent unrelated people from entering the area.<br>Wear respiratory protection, eye protection, hand protection and body protection (see section 8 "Exposure Controls / Personal Protection").  |
| Precautions for environment  | Avoid release to the environment.<br>If spilt is little, absorb any spilt liquid with an absorbent (e.g. waste) and dispose of according to regulations.<br>If spilt is much, it should be surrounded by banking not to enter into environmental waters. |

---

#### 7. Handling and storage

|                               |  |
|-------------------------------|--|
| Precautions for safe handling |  |
|-------------------------------|--|

|                                 |  |
|---------------------------------|--|
| Technical measure               | The handling should be performed on the basis of description in the section 8 "Exposure control / personal protection".  |
| Precautions for safety handling | Wash hands thoroughly after handling.<br>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Ground/bond container and receiving equipment.<br>Use explosion-proof electrical/ventilating/lighting equipment.<br>Do not eat, drink or smoke when using this product.<br>Use only non-sparking tools<br>Take precautionary measures against static discharge.<br>Wash contaminated clothing before reuse. |
| Storage                         | Avoid irradiation of sun-light and keep substance in cool and dark condition.<br>Avoid contact with hot substances.  |

---

|                          |  |
|--------------------------|--|
| Control concentration    | No setting   |
| Allowable concentration  | No setting   |
| Technical measures       | In the place where the substance is stored and used, provide facilities for eye washing and a shower to wash an entire body.<br>Install ventilation equipment. |
| Respiratory protection   | Wear appropriate respiratory protective equipment (gas filter etc.).   |
| Hand protection          | Use protective gloves. The glove material must be sufficiently impermeable and resistant to the substance.   |
| Eye protection           | Wear glasses with side protection.   |
| Skin and body protection | Depending on the risk, wear a suitable protective clothing or a suitable chemical protection suit.   |
| Physical state           | liquid   |
| Color                    | yellow to brown  |
| Odor                     | peculiar odor  |
| Melting point            | -15 °C (GESTIS)  |
| Boiling point            | 215°C (HSDB)   |
| Flammability             | Flammable  |
| Explosion                |  |
| lower explosion limit    | 1.2% (GESTIS)  |
| upper explosion limit    | 7.0% (GESTIS)  |

|   |   |
|---|---|
| Flash point   | 90°C(Cleveland open-cup) (our company's data) |
| Ignition point                                      | 425°C (GESTIS)                                |
| Decomposition temperature                           | No data                                       |
| pH  | No data                                       |
| Kinematic viscosity                                 | No data                                       |
| Solubility  | 455 mg/L (water, 25°C) (HSDB)                 |
| Partition coefficient<br>(water/n-octanol, log Kow) | 2.81 (HSDB)                                   |
| Vapor pressure                                      | 0.1 hPa (GESTIS)                              |

---

### 10.Stability and Reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | Stable under usual handling condition.                                |
| Chemical stability                 | Stable under usual handling condition.                                |
| Possibility for hazardous reaction | Combustion may generate harmful and corrosive gases (Nitrogen oxide). |
| Conditions to avoid                | Store in a cool and dark place away from direct sunlight.             |
| Incompatible materials             | Oxidizing agents and reducing agents.                                 |
| Hazardous decomposition products   | Carbon dioxide, carbon monoxide, nitrogen oxide                       |

---

### 11. Toxicological information

|   |   |
|---|---|
| Acute toxicity  | Orl-rat : LD50=1650mg/kg (HSDB)<br>Skn-rbt : LD50 > 2000mg/kg (HSDB)<br>Inh-rat : LC50=1.4mg/L/4H HSDB)   |
| Skin corrosion / irritation                           | No data   |
| Serious eye damage / irritation                       | No data   |
| Carcinogenicity                                       | IARC classified this substance as category 2B.  |
| Specific target organ toxicity<br>(single exposure)   | There are some reports that the substance may cause effects on the red blood cells and may result in the formation of methaemoglobin. The effects may be delayed. (ICSC 2019) |
| Specific target organ toxicity<br>(repeated exposure) | There are some reports that the substance may have effects on the respiratory organs, kidneys and liver. (ICSC 2019)  |
| Ecotoxicity   |   |
| Aquatic environmental toxicity<br>(acute)             | LC50=46 mg/L (fish, 96H) [AQUIRE(2013)]   |
| Aquatic environmental toxicity<br>(chronic)           | No certain data. This substance doesn't decompose rapidly. Acute toxicity is classified as category 3.  |
| Harmfulness to ozone layer                            | This substance is not listed in the appendix of Montreal  |

Protocol.

---

### 13. Attention for disposal

|                                       |   |
|---------------------------------------|---|
| Residual waste                        | For disposal, follow relevant regulations and local authority standards.<br>Dispose of waste by consignment to a waste disposal contractor authorized by the prefectural governor, or the local municipal entity.<br>When consigning waste to a contractor, be sure to provide sufficient notice of hazards and toxicity. |
| Contaminated containers and packaging | Wash and recycle the containers, or follow relevant regulations and local authority standards for disposal.   |

---

### 14. Transport information

|                           |  |
|---------------------------|--|
| International regulations |  |
| UN No.                    | 2810   |
| Proper shipping name      | Toxic Liquid, Organic, N.O.S.  |
| Class                     | 6.1  |
| Packing group             | II   |
| Marine pollutant          | Not applicable   |
| Domestic regulations      | Follow each local regulation.  |
| Fire defense law          | Type 4 flammable liquid, Type 3 petroleum nonaqueous solvent (Article 2 paragraph 7 of the Law, Hazardous Substance Attached Table No. 1), Danger rating III |
| Ship Safety Law           | Toxic substances   |
| Aviation law              | Toxic substances   |

---

### 16. Other information

|           |                                  |
|-----------|----------------------------------|
| Reference | Listed next to each information. |
|-----------|----------------------------------|

---

### 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.