**

🔀 Mitsuboshi Chemical Co., Ltd.

Date: Nov. 1st, 2023

	Safety Data Sheet
1. Identification	
Product name	Diethyl-m-toluidine
Product code	DEmT
Manufacturer name	Mitsuboshi Chemical Co., Ltd.
Address	14 Kitanoharacho, Kamigamo, Kita-ku, Kyoto, 603-8006,
	Japan
Contact	Development and Technical Division
Telephone number	+81-75-781-1177
Emergency telephone number	+81-75-781-1177
FAX number	+81-75-701-7227
2. Hazards identification	
GHS classification	
Health hazards	
Acute toxicity(inhalation)	Category 4
GHS label elements	
Pictograms and hazard	\wedge
symbol	
	$\mathbf{\nabla}$
Signal word	Warning
Hazard statements	Harmful if inhaled.
Precautionary statement	
Prevention	Avoid breathing dust/fumes/gas/mist/vapors/spray.
	Use only outdoors or in a well-ventilated area.
First aid measures	If inhaled: Remove person to fresh air and keep
	comfortable for breathing.
	Call a doctor if you feel unwell.
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,N-Diethyl-m-toluidine
Synonyms	N,N-Diethyl-3-methylaniline
	N,N-Diethyl-3-methylbenzeneamine
	3-Diethylaminotoluene
Concentration	>98.5%

Chemical formula	/ C11H17N
CAS number	91-67-8
4. First aid measures	
If inhaled	Remove person to fresh air and keep comfortable for
	breathing.
	Call a doctor, if you feel unwell.
lf on skin	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
	Wash with plenty of soap and water.
	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	Get immediate medical advice/attention.
	Rinse mouth.
	Get medical advice/attention.
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	Harmful or toxic fume and gases may be generated in a fire. The gas that contains CO and NOx may be generated.
Specific fire extinguishing method	Stop the supply of the conbustible material, and extiguish the fire by appropriate fire extiguisher.
	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	Wear appropriate self-contained breathing apparatus and
precautions for fire fighters	chemical resistant protective clothing that can protect eyes and skin.
6. Accidental release measures	-
Personal precautions, protective	Workers should wear appropriate protective equipment,
equipment and emergency procedures	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
Containment and clean-up	ground water in order to avoid impact on the environment.
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
	asborption 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 smoking.
	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.
Avoidance of contact	Please refer to "10. Stability and reactivity".
Storage	
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	Use a container specified in the Fire Service Law or
materials	United Nations transportation regulations.
8. Exposure control/ Personal	
protection	
Control concentration	No setting
Threshold limit value	
Japan Society for Occupational	No setting
Health	
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
. Physical and chemical	
properties	
Physical state, appearance	Liquid (20°C, 1atm)
Color	Pale yellow or pale brown
Odor	Peculiar odor
Melting point	-17 °C (GESTIS)
Boiling point	231.5°C (EPA, DSSTox)
Flammability	Yes
Explosion limit	
Upper limit	No data
Lower limit	No data
Flash point	104 °C (Cleveland open-cup, our company's data)
Auto-ignition temperature	ca 500 °C (GESTIS)
Decomposition temp.	No data
pH	No data
Kinematic viscosity	No data
Solubility	Very slightly soluble in water
Partition coefficient :octanol / water	No data
Evaporation rate (Butyl acetate $=$ 1)	No data
Vapor pressure	No data
Density	0.926 (our company's data)
Relative vapor density(air=1)	5.64
Particle characteristics	Not applicable
0. Stability and reactivity	····
Reactivity	React with acid or oxidizer.
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
-	Heating causes combustion, harmful fume gas is
Hazardous decomposition	

Acute toxicity

Oral	No data
Dermal	No data
Inhalation(vapor)	No data
Inhalation(mist)	LC ₅₀ =4660 mg/m ³ (4hr)
Skin corrosion/irritation	No data
Serious eye damage/eye irritation	No data
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	No data
Chronic hazard	No data
Hazard to the ozone layer mobility	No data
13.Disposal consideration	
Residual waste	Dispose of contents 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	
Marine transport	Please, follow the regulations of IMO.
Aerial transport	Please, follow the regulations of ICAO/IATA
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	The evidence data are indicated in some lines.
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.