

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Dimethylthio toluene diamine (DMTDA)

Version 1.0

Issue date: 22/08/2018

Revision date: 22/08/2018

SDS Record Number: CSSS-TCO-010-117917

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Dimethylthio toluene diamine (DMTDA)
 Additional identification: Dimethylthiotoluenediamine
 Identification of the product: CAS# 106264-79-3; EC# 403-240-8
 Index Number: -
 REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Intermediate.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -
 Supplier(Manufacturer): Nanjing Unistar New Materials Co., Ltd.
 Address: 199 Lushan Road, Nanjing 210019, China
 Contact person(E-mail): brucelu@nj-unistar.com
 Telephone: +86-25-83318985
 Fax: +86-25-83378985

1.4 Emergency telephone Number:

+86-25-83318985 Only available during office hours (8:30a.m.-17:30p.m. Beijing Time Zone)

Available outside office hours? YES NO

Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Acute Tox. 4	H312
Eye Irrit. 2	H319
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

H302: Harmful if swallowed

H312: Harmful in contact with skin

H319: Causes serious eye irritation

H373: May cause damage to organs through prolonged or repeated exposure(pancreas)

H410: Very toxic to aquatic life with long lasting effects

Precautionary statement:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P330: Rinse mouth.

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

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P501: Dispose of contents/container in accordance with local regulation.

2.3 Other hazards:

Not available (PBT,vPvB, Substance is an endocrine disruptor etc.)

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
dimethylthio toluene diamine	-	106264-79-3	403-240-8	> 97.5 %

Section 4 First aid measures

4.1 Description of first aid measures:

Product name: Dimethylthio toluene diamine (DMTDA)

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Consult a physician. Show this safety data sheet to the doctor in attendance.

4.1.1 In case of inhalation:

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

4.1.2 In case of skin contact:

After contact with skin, wash immediately with plenty of soap and water. Consult a physician.

4.1.3 In case of eyes contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Call a physician immediately.

4.1.4 In case of ingestion:

Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure (pancreas).

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Water sprays (mist), dry powder, foam.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Heating or fire can release toxic gas. Carbon oxides. Nitrogen oxides (NO_x).

5.3 Special fire fighting methods and special protective actions for fire-fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to cool unopened containers.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Use respirator when performing operations involving potential exposure to vapor of the product.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated. Ensure adequate ventilation.

6.2 Environmental Precautions:

Do not flush into surface water or sanitary sewer system.

6.3 Methods for Containment and Cleaning up:

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections:

For disposal see section 13.

6.5 Additional information:

Wet clean or vacuum up solids.

Don't use a brush or compressed air for cleaning surfaces or clothing.

Clear spills immediately.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms. Advice on protection against fire and explosion. Take precautionary

7.1.2 Advice on general occupational hygiene:

measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities:

Avoid contact with skin, eyes and clothing. Wash hands and face thoroughly after handling.

7.3 Specific end use(s):

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well ventilated place.

No data available.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Not available

8.1.2 Additional exposure limits under the conditions of use:

Not available

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 0.13 mg/m³

Workers - Hazard via dermal route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 1 mg/kg bw/day

General Population - Hazard via inhalation route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 0.1 mg/m³

General Population - Hazard via dermal route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 1 mg/kg bw/day

General Population - Hazard via oral route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 0.1 mg/kg bw/day

PNEC aqua (freshwater): 0.0005 mg/L

PNEC aqua (marine water): 0.00005 mg/L

PNEC aqua (intermittent releases): 0.005 mg/L

PNEC STP: 17 mg/L

PNEC sediment (freshwater): 0.029 mg/kg sediment dw

PNEC sediment (marine water): 0.0029 mg/kg sediment dw

PNEC soil: 5.6 µg/kg soil dw

PNEC oral: 2 mg/kg food

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection:

Chemical goggles or face shield with safety glasses.

Hand protection:

Use neoprene or nitrile rubber gloves.

Body protection:

A protective apron or suit such as polyethylene tyvek or equivalent should be used to minimize exposure from splashes.

Respiratory protection:

Approved organic vapor respirator when exposed to vapors from heated material. Approved supplied-air respirator, in case of emergency.

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Liquid

Colour:	Brown, darkens with time
Odour:	Amine-like
Odour threshold:	Not available
pH:	ca. 8 (1 g/l)
Melting point/range (°C):	>= -6 °C
Boiling point/range (°C):	>= 308.3 °C
Flash point (°C):	>= 156 °C
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Not available
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C):	Not available
Vapour density:	Not available.
Density:	>= 1.25 g/mL
Bulk density (kg/m³):	Not available
Water solubility (g/l):	Soluble
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	C ₉ H ₁₄ N ₂ S ₂
Molecular Weight:	214.36

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	The test material was soluble at greater than 50 wt% in acetone, 1, 2-dichloroethane, dimethylformamide, 4-methyl-2-pentanone, octanol, tetrahydrofuran, and toluene at 30 °C.
Surface tension:	50 mN/m
Dissociation constant in water(pKa):	>= 2.5
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	Reacts with peroxides and other radical forming substances. Catalytic decomposition of hydrogen peroxide.
10.4 Conditions to avoid:	Incompatible materials. Exposure to air.
10.5 Incompatible materials:	Strong acids. Strong oxidizing agents.
10.6 Hazardous decomposition products:	Carbon oxides. Nitrogen oxides (NOx).

Section 11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution:

Non-human toxicological data: Not available

11.2 Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): Not available

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Not classified

Serious eye damage/Irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure (pancreas).

Aspiration hazard: Not classified

Section 12 Ecological information

12.1 Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	200 mg/L	48h	Fish	OECD 203	N/A	N/A
EC50	0.5 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	104 mg/L	72h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability: Not readily biodegradable.

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

12.5 Results of PBT&vPvB assessment: The substance is not PBT / vPvB

12.6 Other adverse effects: Very toxic to aquatic life with long lasting effects.

Section 13 Disposal considerations

13.1 Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

13.2 Product / Packaging disposal: If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3082	3082	3082
UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE	ENVIRONMENTALLY HAZARDOUS SUBSTANCE	ENVIRONMENTALLY HAZARDOUS SUBSTANCE

	LIQUID, N.O.S (dimethylthio toluene diamine)	LIQUID, N.O.S (dimethylthio toluene diamine)	LIQUID, N.O.S (dimethylthio toluene diamine)
Transport hazard Class	9	9	9
Packaging group	III	III	III
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC03	IBC03	IBC03

Section 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment has been carried out? YES NO

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by EU No 2015/830

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.