

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **DIMETHYL-P-TOLUIDINE**

Other name(s): N,N-Dimethyl-p-toluidine; N,N,4-Trimethylbenzeneamine; 4-Dimethylaminotoluene; N,N,4-Trimethylaniline.

Recommended Use of the Chemical and Restrictions on Use Chemical dye.

Supplier: Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226
Street Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700
Facsimile: +64 9 368 2710
Emergency Telephone: **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

SIGNAL WORD: DANGER

Subclasses:

Subclass 3.1 Category D (low hazard) - Flammable Liquids.
Subclass 6.1 Category D - Substances which are acutely toxic.
Subclass 6.3 Category B - Substances that are mildly irritating to the skin.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 9.1 Category C - Substances that are harmful in the aquatic environment.

Approval Number: HSR003833



Hazard Statement(s):

H227 Combustible liquid.
H302+H332 Harmful if swallowed or if inhaled.
H313 May be harmful in contact with skin.
H316 Causes mild skin irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P260 Do not breathe mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

Response:

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

P330 Rinse mouth.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

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

P314 Get medical advice/attention if you feel unwell.

P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.

Storage:

P403+P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
N,N-Dimethyl-p-toluidine	99-97-8	100%	H331 H311 H301 H373 H412

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. This material can be absorbed through the skin with resultant adverse effects. Seek immediate medical assistance.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

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Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Get to a doctor or hospital quickly.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. May cause methemoglobinemia. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Water jet.

Hazchem or Emergency Action Code: 2X

Specific hazards arising from the chemical:

Combustible liquid. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Environmentally hazardous.

Special protective equipment and precautions for fire-fighters:

On burning will emit toxic fumes, including those of oxides of carbon. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols. May form flammable vapour mixtures with air. Take precautionary measures against static discharges. When using do not eat, drink or smoke. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Store in a cool and well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority.

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Appropriate engineering controls:

Use in well ventilated areas. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, RESPIRATOR.



Wear overalls, safety glasses and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Clear , Oily Liquid
Colour:	Colourless to Light Yellow
Odour:	Sweet , Aromatic
Molecular Formula:	C9H13N
Solubility:	Insoluble in water. Soluble in organic solvents
Specific Gravity:	0.937 @25°C
Relative Vapour Density (air=1):	5.42
Vapour Pressure (20 °C):	0.15 mm Hg
Flash Point (°C):	76 (Closed Cup)
Flammability Limits (%):	1.2-7% (V)
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	211
pH:	Not available
Freezing Point/Range (°C):	-27

10. STABILITY AND REACTIVITY

Reactivity:	Reacts with oxidising agents.
Chemical stability:	Stable.
Possibility of hazardous reactions:	Hazardous polymerisation will not occur.
Conditions to avoid:	Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with oxidising agents , acids , acid chlorides , acid anhydrides .
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs.

Eye contact: May be an eye irritant.

Skin contact: Contact with skin will result in mild irritation.

Inhalation: Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Acute toxicity:

Oral LD50 (rat): 980 mg/kg

Dermal LD50 (rabbit): >2000 mg/kg

Inhalation LC50 (rat): 1400 mg/m³/4h

Respiratory or skin sensitisation: No information available.

Chronic effects: Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the blood system.

Specific Target Organ Toxicity (STOT) - single exposure: No information available.

Specific Target Organ Toxicity (STOT) - repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: No information available.

Available evidence suggests that repeated or prolonged exposure to dimethyl-p-toluidine may result in changes in the blood. Specifically haemoglobin may be converted to methaemoglobin. Methaemoglobinaemia leads to a generalized lack of oxygen in the blood.

This material has been classified by the International Agency for Research on Cancer (IARC) as a Group 2B. Group 2B - The agent is possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: The material is not readily biodegradable.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Aquatic toxicity: Harmful to aquatic organisms. May cause long lasting harmful effects to aquatic life.

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96hr LC50 (fathead minnow): 46-52 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.



UN No: 2810
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: TOXIC LIQUID, ORGANIC, N.O.S. (DIMETHYL-p-TOLUIDINE)
Hazchem or Emergency Action Code: 2X

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 2810
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: TOXIC LIQUID, ORGANIC, N.O.S. (DIMETHYL-p-TOLUIDINE)
IMDG EMS Fire: F-A
IMDG EMS Spill: S-A

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 2810
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: TOXIC LIQUID, ORGANIC, N.O.S. (DIMETHYL-p-TOLUIDINE)

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

Product Name: DIMETHYL-P-TOLUIDINE
Substance No: 000000014265

Issued: 08/03/2019
Version: 5

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Subclasses:

Subclass 3.1 Category D (low hazard) - Flammable Liquids.

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16. OTHER INFORMATION

Supplier Safety Data Sheet; 02/ 2017.

'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2018.

In: 'Handbook of Environmental Data on Organic Chemicals'. 3rd Edition. Ed. Verschueren. Van Nostrand Reinhold Company, New York 1996.

Reason(s) for Issue:

5 Yearly Revised Primary SDS

Update in Toxicological Information

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.