

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
ABN: 51 600 546 512
Street Address: Level 8, 1 Nicholson Street
East Melbourne Victoria 3002
Australia

Telephone Number: +61 3 9906 3000
Emergency Telephone: **1 800 033 111 (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 Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Flammable liquids - Category 4
Acute Oral Toxicity - Category 3
Acute Dermal Toxicity - Category 3
Acute Inhalation Toxicity - Category 3
Specific target organ toxicity (repeated exposure) - Category 2

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 3
Chronic Aquatic Toxicity - Category 3

SIGNAL WORD: DANGER



Hazard Statement(s):

H227 Combustible liquid.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet



Precautionary Statement(s):

Prevention:

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

Response:

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P361 Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before re-use.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311 Call a POISON CENTER or doctor/physician.
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 to extinguish.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): None allocated.

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 discoloration 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.

Safety Data Sheet



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.

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

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

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.

Safety Data Sheet



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

Control Parameters: No value assigned for this specific material by Safe Work Australia.

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.

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

Issued: 08/03/2019
Version: 5

Safety Data Sheet



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. Methaemoglobinanaemia 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.

Safety Data Sheet



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

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; 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)
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

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

Issued: 08/03/2019
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Proper Shipping Name or Technical Name: TOXIC LIQUID, ORGANIC, N.O.S. (DIMETHYL-p-TOLUIDINE)

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Flammable liquids - Category 4
Acute Oral Toxicity - Category 3
Acute Dermal Toxicity - Category 3
Acute Inhalation Toxicity - Category 3
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The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

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Hazard Statement(s):

H227 Combustible liquid.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

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. Verschuere. 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.