



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: 2,4-DIMETHYLANILINE

CAS Number: 95-68-1

1. IDENTIFICATION:

Product Code : 93336

Company Name : ADVENT CHEMBIO PRIVATE LIMITED

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2. HAZARDS IDENTIFICATION:**Hazard classification****Health hazards**

Acute toxicity, Oral : Category 3

Acute toxicity, Dermal : Category 3

Acute toxicity, Inhalation : Category 3

Specific target organ toxicity - repeated exposure, Oral : Category 2

Long-term (Chronic) aquatic hazard : Category 2

Labels elements :

Hazard symbol :



Signal word : Danger

Hazard statement

Toxic if swallowed, in contact with skin or if inhaled.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

: Obtain special instructions before use.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
Keep container tightly closed. Ground/ bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools. Take precautionary measures against static discharge.

Response

: IF exposed or concerned: Get medical advice/ attention.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/



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	shower.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Storage	: Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Disposal	: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/ INFORMATION ON INGRADIENTS:

Ingredient	CAS Number	Percent	Hazardous
2,4-Dimethylaniline	95-68-1	NLT 98.0%	Yes

4. FIRST AID MEASURES:

General information	: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
Ingestion	: Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Inhalation	: Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.
Skin contact	: Get medical attention if symptoms persist.
Eye contact	: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Most important symptoms/effects, acute and delayed	: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Indication of immediate medical attention and special treatment needed	: Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin. Irritating to eyes, respiratory system and skin.
	: Symptoms may be delayed. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

General information : No data Available.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray, foam, dry powder or carbon dioxide.



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Unsuitable extinguishing media : Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical : Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Vapor from the solvent may accumulate in container headspace resulting in flammability hazard. Heat may cause the containers to explode.

Special protective equipment and precautions for firefighters

Special firefighting procedures : Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Special protective equipment for fire-fighters : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up : Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental precautions : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE:

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.



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8. EXPOSURE CONTROLS PERSONAL PROTECTION:**Control parameters****Appropriate engineering****controls** : No data available**Individual protection measures, such as personal protective equipment**

General information : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

Eye/face protection : Wear safety glasses with side shields (or goggles).

Hand protection : Chemical resistant gloves.

Other : Wear suitable protective clothing.

Respiratory protection : In case of inadequate ventilation use suitable respirator. Chemical Respirator with organic vapor cartridge.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance : Reddish Liquid.

Odor : No data available.

Solubility : No data available.

Formula : $C_8H_{11}N$

Molecular Weight : 121.18 g/mol

Specific Gravity : 0.98 g/cm³ at 25°C

pH : No data available.

% Volatiles by volume @ 21°C (70F) : No data available.

Boiling Point : 218°C

Melting Point : -14,3°C

Flash Point : 98 °C

Vapor Density (Air=1) : 4.18

Vapor Pressure (mm Hg) : 0,51 hPa at 38 °C
0,21 hPa at 25 °C



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Evaporation Rate (BuAc=1) : No data available.

10. STABILITY AND REACTIVITY:

Reactivity	:	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	:	Material is stable under ambient conditions.
Possibility of hazardous reactions	:	Exothermic reaction with: Organic acids mineral acids Acid chlorides Acid anhydrides Oxidizing agents halogens Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines.
Conditions to avoid	:	Heat, sparks, flames. Sunlight.
Incompatible materials	:	Rubber, various plastics.
Hazardous decomposition products	:	In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION:**Information on likely routes of exposure**

Ingestion	:	Irritating. May cause nausea, stomach pain and vomiting.
Inhalation	:	May cause irritation to the mucous membranes and upper respiratory tract. May cause central nervous system effects
Skin contact	:	Causes mild skin irritation
Eye contact	:	Causes serious eye irritation.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product	:	LD 50 Mouse - 250 mg/kg
Dermal Product	:	No data available.
Inhalation Product	:	No data available.
Repeated dose toxicity Product	:	No data available.
Skin corrosion/irritation Product	:	No data available.
Serious eye damage/eye irritation Product	:	Irritating to eyes.
Respiratory or skin sensitization Product	:	Not a skin sensitizer.
Carcinogenicity Product	:	This substance has no evidence of carcinogenic properties
IARC Monographs on the Evaluation of Carcinogenic	:	No carcinogenic components identified.



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Risks to Humans

US. National Toxicology
Program (NTP) Report on
Carcinogens

: No carcinogenic components identified.

US. OSHA Specifically
Regulated Substances (29
CFR 1910.1001-1050
Germ cell mutagenicity

: No carcinogenic components identified.

In vitro Product

: No data available.

Reproductive toxicity
Product

: No components toxic to reproduction

Specific target organ
toxicity - single exposure
Product

: Not known.

Specific target organ
toxicity - repeated
exposure Product

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Product

: No data available.

Other effects

: None known.

12. ECOLOGICAL INFORMATION:

Ecotoxicity

Acute hazards to the aquatic environment

Fish Product

: LC50 - Leuciscus idus melanotus - 196 mg/l.
: LC0 - Leuciscus idus melanotus - 98 mg/l.Aquatic invertebrates
Product

: EC50 - Daphnia magna (Water flea) - 9,9 mg/l.

Chronic hazards to the aquatic environment

Fish Product

: No data available.

Aquatic invertebrates
Product

: No data available.

Toxicity to Aquatic Plants
Product:

: No data available.

Persistence and degradability

Biodegradation Product

: No data available

BOD/COD ratio Product

: No data available.

Bioaccumulative potential

Bioconcentration factor
(BCF) Product

: No data available on bioaccumulation.



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Partition coefficient n-octanol / water (log Kow) : No data available.

Product

Mobility in soil : The product is partly soluble in water. May spread in the aquatic environment.

Other adverse effects : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. DISPOSAL CONSIDERATION:

Disposal instructions : Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.

Contaminated packaging : Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION:

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 1711	2,4-Dimethylaniline	6.1	II	Yes
IMDG	UN 1711	2,4-Dimethylaniline	6.1	II	Yes
IATA	UN 1711	2,4-Dimethylaniline	6.1	II	No

15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No Data Available.

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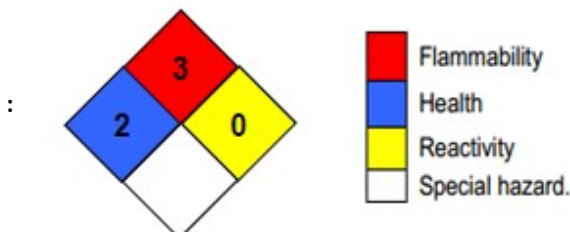
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16. OTHER INFORMATION:

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 06/01/2025

Version : 02

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