

GPS Safety Summary 2,6-diethyl-4-methylaniline

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1. General Statements

2,6-diethyl-4-methylaniline is a yellowish liquid or amine-like odour. Combustible substance, poorly flammable. Very slightly soluble in water. Low or very low-volatile. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment.

2. Chemical identification.

Name :2,6-diethyl-4-methylaniline

CAS number(s) :24544-08-9 EC number :246-307-5 Molecular formula :C11H17N

Structure :

3. Uses and Benefits

It is used as an intermediate in the synthesis of local anesthetics, particularly articaine, which is widely used in dentistry. It can serve as a building block in the production of herbicides or pesticides. Aromatic amines like this are often precursors in the manufacture of azo dyes.

4. Physical / chemical properties

Property	Value	
Physical state :	Liquid	
Colour :	Yellow	
Odour :	Amine-like odour	
рН :	6.9	
Melting point :	-12 to -7 °C	
Boiling point :	229.4 ± 9.0°C at 760 Torr.	
Flash point :	118 °C	
Density:	0.96 g/cm3 at 20 °C	
Solubility in Water:	0.57g/l at 20 °C	

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Harmful if swallowed or in contact with skin
Irritation / corrosion Skin / eye/ respiratory tract	NA
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	Result
Persistence and degradability	Not rapidly degradable
Bioaccumulative potential	No additional information available

7. Exposure

Human health

2,6-diethyl-4-methylaniline is Harmful if swallowed or in contact with skin.Intake of 2,6-diethyl-p-toluidine (D.) is assumed to be possible particularly via inhalation and through the skin.The exposure must be kept as minimum as possible by the use of appropriate risk management measures suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals.Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment:

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures.

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.		
Protection	Eye protection:	Wear eye protection. Safety glasses	
	Skin and body protection:	In case of dust production: head/neck protection. long sleeved protective clothing. Wear foot protection	
	Respiratory protection:	[In case of inadequate ventilation] wear respiratory protection. In case of inadequate ventilation wear respiratory protection. Self-contained breathing apparatus	
Engineering controls	Ensure that there is a suitable ventilation system. Keep in a cool place. Ensure good ventilation of the work station.		
Environment protective measures			
Avoid release to the environment			

9. First-aid measures

First-aid measures after inhalation:Remove the person to fresh air and keep them comfortable for breathing. Remove the victim into fresh air.Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Take the victim to a doctor if irritation persists. Wash skin with plenty of water. Take off contaminated clothing.

First-aid measures after eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Call a poison center or a doctor if you feel unwell.

10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Dry chemical, CO2, dry sand, or alcohol-resistant foam. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media: Do not use a heavy water stream.

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Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire:TOn burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide

Advice for firefighters

Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: Fight fire from safe distance and protected location. Do not enter a fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment: Safety glasses. Wear recommended personal protective equipment. Gloves.

Environmental precautions: Avoid release to the environment.

For containment: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks without risks if possible.

12. Disposal consideration

Regional legislation (waste): Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling: Ensure good ventilation of the work station. Clean contaminated clothing. Avoid contact with skin, eyes and clothing. Do not discharge the waste into the drain. Eliminate all ignition sources if safe to do so. Handle and open the container with care. Handle carefully. Keep container tightly closed. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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14. Classification and Labeling

Hazard pictograms (GHS US)

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Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US) : Warning

: H302+H312 - Harmful if swallowed or in contact with skin

: P264 - Wash hands, forearms and face thoroughly after handling.

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

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing

protection.

P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

P302+P352 - If on skin: Wash with plenty of water. P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulations.

15. Conclusion

2,6-diethyl-4-methylaniline is a yellowish liquid or amine-like odour. Combustible substance, poorly flammable. Very slightly soluble in water. Low or very low-volatile. Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment. It is Harmful if swallowed or in contact with skin. 2,6-Diethyl-p-toluidine is toxic and potentially carcinogenic. Like other aromatic amines, it must be handled with care due to risks of methemoglobinemia, skin absorption, and long-term health effects. Proper PPE and ventilation are required when handling it. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

Manufacturer

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This GPS safety summary is intended to give general information about the health, safety and environment and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.