

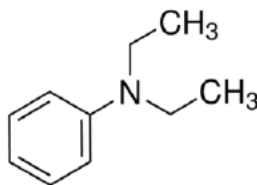
CAS-No.: 91-66-7 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
 :
 EC Index-No. : 612-054-00-8
 EC-No. : 202-088-8
 CAS-No. : 91-66-7
 Product code : 03322
 Formula : C₁₀H₁₅N
 Chemical structure :



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
 For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
 1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
 Ludhiana Pb. (141007)
 +91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H301
 Category 3
 Acute toxicity (dermal), H311
 Category 3
 Acute toxicity (inhal.), H331
 Category 3
 Specific target organ toxicity — Repeated H373

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exposure, Category 2
Hazardous to the aquatic H411
environment — Chronic
Hazard, Category 2

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R23/24/25
N; R51/53
R33

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing vapours, spray, dust, fume, gas.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor
P311 - Call a POISON CENTER/doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : N,N-DIETHYLANILINE AR
CAS-No. : 91-66-7
EC-No. : 202-088-8
EC Index-No. : 612-054-00-8

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Full text of R- and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | : Wash with plenty of water/.... Get immediate medical advice/attention. Wash contaminated clothing before reuse. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Obtain emergency medical attention. |

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

| | |
|-------------------------------------|--|
| Symptoms/effects | : May cause damage to organs through prolonged or repeated exposure. |
| Symptoms/effects after inhalation | : Toxic if inhaled. |
| Symptoms/effects after skin contact | : Toxic in contact with skin. |
| Symptoms/effects after ingestion | : Toxic if swallowed. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Carbon dioxide. Dry powder. Foam. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
|--------------------------------|---|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

| | |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

6.1.2. For emergency responders

| | |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

Toxic to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| Methods for cleaning up | : Collect spillage. On land, sweep or shovel into suitable containers. |
|-------------------------|--|

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-------------------------------|---|
| Precautions for safe handling | : Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--------------------|--|
| Storage conditions | : Store in a well-ventilated place. Keep container tightly closed. |
|--------------------|--|

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

| | |
|--------------------------|--|
| Hand protection | : Protective gloves |
| Eye protection | : Chemical goggles or safety glasses |
| Skin and body protection | : Wear suitable protective clothing |
| Respiratory protection | : [In case of inadequate ventilation] wear respiratory protection. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------------|
| Physical state | : Liquid |
| Molecular mass | : 149.24 g/mol |
| Colour | : Brownish yellow liquid. |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : -38 °C |
| Freezing point | : No data available |
| Boiling point | : 217 °C |
| Flash point | : 88 °C |
| Auto-ignition temperature | : 630 °C |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |

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| | |
|----------------------------------|--|
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : 1 |
| Relative density | : No data available |
| Density | : 0.9302 g/cm ³ |
| Solubility | : Water: Partially soluble in cold water |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Overheating. Open flame. Direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

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| | |
|---|--|
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : May cause damage to organs through prolonged or repeated exposure. |
| Additional information | : There are potential chronic health effects to consider |
| Aspiration hazard | : Not classified |
| Potential adverse human health effects and symptoms | : Toxic if swallowed. Toxic in contact with skin. |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

N,N-DIETHYLANILINE AR (91-66-7)

| | |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
|-------------------------------|---|

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|---|
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Ecology - waste materials | : Hazardous waste due to toxicity. |

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

| | |
|---------------|--------|
| UN-No. (ADR) | : 2432 |
| UN-No. (IMDG) | : 2432 |
| UN-No. (IATA) | : 2432 |

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UN-No. (ADN) : 2432
UN-No. (RID) : 2432

14.2. UN proper shipping name

Proper Shipping Name (ADR) : N,N-DIETHYLANILINE
Proper Shipping Name (IMDG) : N,N-DIETHYLANILINE
Proper Shipping Name (IATA) : n,n-Diethylaniline
Proper Shipping Name (ADN) : N,N-DIETHYLANILINE
Proper Shipping Name (RID) : N,N-DIETHYLANILINE
Transport document description (ADR) : UN 2432 N,N-DIETHYLANILINE, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 2432 N,N-DIETHYLANILINE, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 2432 n,n-Diethylaniline, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 2432 N,N-DIETHYLANILINE, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 2432 N,N-DIETHYLANILINE, 6.1, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1
Danger labels (ADR) : 6.1



IMDG

Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1
Hazard labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1
Danger labels (ADN) : 6.1

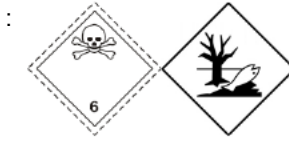


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RID

Transport hazard class(es) (RID) : 6.1
Danger labels (RID) : 6.1



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

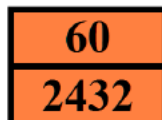
14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : T1
Special provisions (ADR) : 279
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : L4BH
Tank special provisions (ADR) : TU15, TE19
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
Special provisions for carriage - Operation (ADR) : S9
Hazard identification number (Kemler No.) : 60
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : •3X

- Transport by sea

Special provisions (IMDG) : 279
Packing instructions (IMDG) : P001, LP01

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| | |
|------------------------------------|--|
| IBC packing instructions (IMDG) | : IBC03 |
| Tank instructions (IMDG) | : T4 |
| Tank special provisions (IMDG) | : TP1 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-A |
| Stowage category (IMDG) | : A |
| Properties and observations (IMDG) | : Colourless to yellow-brown oily liquid. Combustible. Toxic if swallowed, by skin contact or by inhalation. |
| MFAG-No | : 153 |

- Air transport

| | |
|--|--------|
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y642 |
| PCA limited quantity max net quantity (IATA) | : 2L |
| PCA packing instructions (IATA) | : 655 |
| PCA max net quantity (IATA) | : 60L |
| CAO packing instructions (IATA) | : 663 |
| CAO max net quantity (IATA) | : 220L |
| Special provisions (IATA) | : A113 |
| ERG code (IATA) | : 6L |

- Inland waterway transport

| | |
|-----------------------------------|------------------|
| Classification code (ADN) | : T1 |
| Special provisions (ADN) | : 279, 802 |
| Limited quantities (ADN) | : 5 L |
| Excepted quantities (ADN) | : E1 |
| Carriage permitted (ADN) | : T |
| Equipment required (ADN) | : PP, EP, TOX, A |
| Ventilation (ADN) | : VE02 |
| Number of blue cones/lights (ADN) | : 0 |

- Rail transport

| | |
|---|---------------------------|
| Classification code (RID) | : T1 |
| Special provisions (RID) | : 279 |
| Excepted quantities (RID) | : E1 |
| Packing instructions (RID) | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID) | : MP19 |
| Portable tank and bulk container instructions (RID) | : T4 |
| Portable tank and bulk container special provisions (RID) | : TP1 |
| Tank codes for RID tanks (RID) | : L4BH |
| Special provisions for RID tanks (RID) | : TU15 |
| Transport category (RID) | : 2 |
| Special provisions for carriage – Packages (RID) | : W12 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW13, CW28, CW31 |
| Colis express (express parcels) (RID) | : CE8 |
| Hazard identification number (RID) | : 60 |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

N,N-DIETHYLANILINE AR is not on the REACH Candidate List

N,N-DIETHYLANILINE AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to AwSV; ID No. 1340)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

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| | |
|---------------------------|--|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal), Category 3 |
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| R23/24/25 | Toxic by inhalation, in contact with skin and if swallowed |
| R33 | Danger of cumulative effects |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| N | Dangerous for the environment |
| T | Toxic |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product