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N,N-DIETHYLANILINE 98.5%	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
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1. Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier
Trade name : N,N-DIETHYLANILINE 98.5%
Product code : 14158
Identification of the product : N,N-Diethylaniline
CAS No : 91-66-7
1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.
1.3. Details of the supplier of the safety data sheet
Company identification : MOLYCHEM
Office: 78/80 Babu Genu Road, Souri Bldg., 2 nd Floor, Mumbai – 400 002 (INDIA) Tel:
+91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.
Email : <u>info@molychem.net</u>
Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), DistThane-421 503
1.4. Emergency telephone number
Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm).
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 exposure, H373
Category 2
Hazardous to the aquatic environment — Chronic Hazard, H411
Category 2
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Adverse physicochemical, human health and environmental effects
No additional information available
2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to
displayExtra classification(s) to display
Symbol(s) : T : Very toxic
N : Dangerous for the environment

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R Phrase(s) : R33: Danger of cumulative effects.

R23/24/25: Toxic by Inhalation, in contact with skin and if swallowed.

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s) : S28: After contact with skin, wash immediately with plenty of ...(to be specified by manufacturer).

S37: Wear suitable gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61: avoid release to the environment . refer to special instruction/safety data sheets. **Hazard pictograms**



Signal word : Danger

Hazard statements : 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: 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

3. Composition/information on ingredients

3.1. Substances: N,N-DIETHYLANILINE 98.5%

CAS-No.: 91-66-7

Substance.

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

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First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. First-aid measures after skin contact : Wash with plenty of water/.... Get 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.

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.

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.

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6.4. Reference to other sections

No additional information available

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

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.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Vapour pressure : No data available

Relative vapour density at 20 °C : 1

Relative density : No data available

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Density : 0.9302 g/cm³

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

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

Direct sunlight. Heat.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

<u>11. Toxicological information</u>

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

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



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Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

<u>12. Ecological information</u>

12.1. Toxicity

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

12.2. Persistence and degradability

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

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.

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 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

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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 **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) : 51 Excepted quantities (ADR) : E1 Packing instructions (ADR): P001, IBC03, LP01, R001 Mixed packing provisions (ADR) : MP19 Portable tank and bulk container instructions (ADR) : T4

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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 : $\bullet 3X$ Transport by sea- Special provisions (IMDG): 279 Packing instructions (IMDG): P001, LP01 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

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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 **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 FOR SYNTHESIS is not on the REACH Candidate List N,N-DIETHYLANILINE FOR SYNTHESIS 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

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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

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 **Further information** : None.

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End of document Prepared by: MOLYCHEM (INDIA)

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