# Material Safety Data Sheet N,N-DIISOPROPYL ETHYLAMINE FOR SYNTHESIS Product Code: 51260 VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01 Page 1 of 11

# 1. Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

**Trade name**: N.N-DIISOPROPYL ETHYLAMINE FOR SYNTHESIS

**Product code**: 52160

**Identification of the product**: N,N-Diisopropyl Ethylamine For Synthesis (Ethylene

diisopropylamine) CAS No: 7087-68-5

#### 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<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-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]

Flammable liquids, H225

Category 2

Acute toxicity (oral), H301

Category 3

Skin corrosion/irritation, H314

Category 1B

Hazardous to the aquatic environment — Chronic Hazard, H412

Category 3

#### Classification according to Directive 67/548/EEC or 1999/45/EC

#### 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)**: Highly flammable

C: Corrosive

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**R Phrase(s)**: R11: Highly flammable.

R22: Harmful if swallowed.

R34: Cause burns.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S Phrase(s)**: S16: Keep away from source of ignition-No smoking.

S26: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

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.

S36/37/39: Wear suitable protective clothing and gloves & eye/face protecting.

### Hazard pictograms







Signal word: Danger

**Hazard statements**: H225 - Highly flammable liquid and vapour

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

H412 - Harmful to aquatic life with long lasting effects

**Precautionary statements**: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking

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/...

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER/doctor/...

#### 2.3. Other hazards

No additional information available

#### 3. Composition/information on ingredients

3.1. Substance: N.N-DIISOPROPYLETHYLAMINE FOR SYNTHESIS

CAS No: 7087-68-5

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)
Tel: +91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442. Email: <a href="mailto:info@molychem.net">info@molychem.net</a>
Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

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#### 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

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries: Causes severe skin burns and eye damage.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

**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

Fire hazard: Highly flammable liquid and vapour.

Explosion hazard: May form flammable/explosive vapour-air mixture.

#### **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

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

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#### **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

Avoid release to the environment.

# 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

#### 7. Handling and storage

# 7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling: Avoid contact with skin and eyes. Use only non-sparking tools. Keep away from sources of ignition - No smoking. 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

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting/... equipment. Comply with applicable regulations.

Storage conditions: Keep in fireproof place. Keep container tightly closed.

Incompatible materials: Heat sources.

#### 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 face shield

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Skin and body protection: Wear suitable protective clothing

Respiratory protection: Wear respiratory protection

### 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Odour threshold: No data available

**pH** : 12.3

**Relative evaporation rate (butylacetate=1)**: No data available

Melting point : -50 °C

Freezing point : No data available

**Boiling point**: 127 °C **Flash point**: 10.6 °C

**Auto-ignition temperature** : No data available **Decomposition temperature** : No data available

**Flammability (solid, gas)**: Flammable Highly flammable liquid and vapour **Vapour pressure**: 16 hPa at 20 °C

Relative vapour density at 20 °C : No data available

Relative density: No data available

**Density**: 0.742 g/cm<sup>3</sup>

**Solubility**: No data available **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: 0.007 - 0.063 vol %

9.2. Other information

No additional information available

#### 10. Stability and reactivity

## 10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

# 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Open flame. Heat. Sparks.

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# 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates: Corrosive vapours.

#### 11. Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity: Oral: Toxic if swallowed.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

pH: 12.3

Serious eye damage/irritation : Serious eye damage, category 1, implicit

pH: 12.3

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Harmful if swallowed.

#### 12. Ecological information

#### 12.1. Toxicity

Ecology - water: Harmful 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 ...

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Additional information: Handle empty containers with care because residual vapours are flammable.

### 14. Transport information

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

# **14.1. UN number**

UN-No. (ADR): 2733 UN-No. (IMDG): 2733 UN-No.(IATA): 2733 UN-No.(ADN): 2733 UN-No. (RID): 2733

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR): AMINES, FLAMMABLE, CORROSIVE, N.O.S. / POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S.

Proper Shipping Name (IMDG): AMINES, FLAMMABLE, CORROSIVE, N.O.S.

Proper Shipping Name (IATA): AMINES, FLAMMABLE, CORROSIVE, N.O.S. Proper Shipping Name (ADN): AMINES, FLAMMABLE, CORROSIVE, N.O.S.

Proper Shipping Name (RID): AMINES, FLAMMABLE, CORROSIVE, N.O.S.

Transport document description (ADR): UN 2733 AMINES, FLAMMABLE,

CORROSIVE, N.O.S. / POLYAMINES.

FLAMMABLE, CORROSIVE, N.O.S., 3 (8), II, (D/E)

Transport document description (IMDG): UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S., 3 (8), II

Transport document description (IATA): UN 2733 AMINES, FLAMMABLE,

CORROSIVE, N.O.S., 3 (8), II

Transport document description (ADN): UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S., 3 (8), II

Transport document description (RID): UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S., 3 (8), II

#### **14.3.** Transport hazard class(es)

**ADR-** Transport hazard class(es) (ADR) : 3 (8)

Danger labels (ADR): 3, 8

**IMDG**- Transport hazard class(es) (IMDG): 3 (8)

Danger labels (IMDG): 3, 8

**IATA**- Transport hazard class(es) (IATA) : 3 (8)

Hazard labels (IATA): 3, 8

**ADN**- Transport hazard class(es) (ADN): 3 (8)

Danger labels (ADN): 3, 8

**RID-** Transport hazard class(es) (RID): 3 (8)

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Danger labels (RID): 3, 8

# 14.4. Packing group

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

### 14.5. Environmental hazards

Dangerous for the environment: No

Marine pollutant: No

Other information: No supplementary information available

# 14.6. Special precautions for user

**Overland transport-** Classification code (ADR): FC

Special provision (ADR): 274, 544 Limited quantities (ADR): 1L Excepted quantities (ADR): E2

Packing instructions (ADR): P001, IBC02 Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T11

Portable tank and bulk container special provisions (ADR): TP1, TP27

Tank code (ADR): L4BH Vehicle for tank carriage: FL Transport category (ADR): 2

Special provisions for carriage – Operation (ADR): S2, S20

Hazard identification number (Kemler No.): 338

Orange plates:

Tunnel restriction code (ADR): D/E

EAC code: •2WE APP code : A(fl)

**Transport by sea-** Special provision (IMDG): 274

Limited quantities (IMDG): 1 L Excepted quantities (IMDG): E2 Packing instructions (IMDG): P001

IBC packing instructions (IMDG): IBC02

Tank instructions (IMDG): T11

Tank special provisions (IMDG): TP1, TP27

EmS-No. (Fire): F-E EmS-No. (Spillage): S-C Stowage category (IMDG): B

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Stowage and handling (IMDG): SW2

Segregation (IMDG): SG35

MFAG-No: 132

Air transport- PCA Excepted quantities (IATA): E2

PCA Limited quantities (IATA): Y340

PCA limited quantity max net quantity (IATA): 0.5L

PCA packing instructions (IATA): 352 PCA max net quantity (IATA): 1L CAO packing instructions (IATA): 363 CAO max net quantity (IATA): 5L Special provision (IATA): A3

ERG code (IATA): 3C

Inland waterway transport- Classification code (ADN): FC

Special provisions (ADN): 274, 544 Limited quantities (ADN): 1 L Excepted quantities (ADN): E2 Carriage permitted (ADN): T

Equipment required (ADN): PP, EP, EX, A

Ventilation (ADN): VE01

Number of blue cones/lights (ADN): 1

Rail transport- Classification code (RID): FC

Special provision (RID): 274, 544 Limited quantities (RID): 1L Excepted quantities (RID): E2

Packing instructions (RID): P001, IBC02 Mixed packing provisions (RID): MP19

Portable tank and bulk container instructions (RID): T11

Portable tank and bulk container special provisions (RID): TP1, TP27

Tank codes for RID tanks (RID): L4BH

Transport category (RID): 2

Colis express (express parcels) (RID): CE7 Hazard identification number (RID): 338

# **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

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No REACH Annex XVII restrictions

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

N,N-DIISOPROPYLETHYLAMINE FOR SYNTHESIS is not on the REACH Annex XIV List

#### 15.1.2. National regulations

#### Germany

12th Ordinance Implementing the Federal

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

#### Denmark

Class for fire hazard: Class I-1

Store unit: 1 liter

Classification remarks : F <Flam. Liq. 2>; 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

#### 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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