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

# 1.1. Product identifier

Trade name: n-AMYL ALCOHOL FOR SYNTHESIS

**Product code**: 12308

**Identification of the product**: N-Amyl Alcohol

CAS No :71-41-0

# 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., 2nd 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 -DSD

#### 2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification: R10

Xn; R20 Xi; R37/38

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

**Health hazards**: Specific Target Organ Toxicity - Single exposure - Respiratory tract

irritation - Category 3 - Warning (CLP: STOT SE 3) H335

Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315

Acute toxicity, Inhalation - Category 4 - Warning (CLP: Acute Tox. 4) H332

**Physical hazards**: Flammable liquids - Category 3 - Warning (CLP: Flam. Liq. 3) H226

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

**Symbol(s)** : Xn : Harmful



**R Phrase(s)**: R10: Flammable. R20: Harmful by inhalation.

R37/38: Irritating to respiratory system and skin.

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R66: Repeated Exposure may cause skin dryness or cracking.

**S Phrase(s)**: S1/2: Keep locked up and out of reach of children.

S36/37: Wear suitable protective clothing and gloves.

S46: If swallowed seek medical advice immediately and show this container or label.

# Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



**Signal words**: Warning

**Hazard statements**: H226: Flammable liquid and vapour.

H315 : Causes skin irritation. H332 : Harmful if inhaled.

H335: May cause respiratory irritation.

## **Precautionary statements**

• General: P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

• **Prevention**: P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.

P210: Keep away from heat, sparks, open flames or hot surfaces. – No smoking.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P233: Keep container tightly closed.

P264: Wash thoroughly after handling.

• **Response**: P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical advice.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

P370+P378: In case of fire: Use for extinction.

• Storage: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P403+P235: Store in well-ventilated place. Keep cool.

P405: Store locked up.

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• **Disposal considerations**: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other hazards

**Other hazards**: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

# 3. Composition/information on ingredients

Substance / Preparation : N-Amyl Alcohol

CAS No:71-41-0

Substance.

Substance nameContentsCAS NoN-Amyl Alcohol:100 %71-41-0

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

**Inhalation**: Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact**: Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice. Remove/Take off immediately all contaminated clothing. Specific treatment (see on this label). Wash with plenty of soap and water.

**Eye contact**: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion**: Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

**Symptoms relating to use**: Danger of serious damage to health by prolonged exposure through inhalation. Causes skin irritation. May cause respiratory irritation.

**4.3.** Indication of any immediate medical attention and special treatment needed General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

# 5. Fire-fighting measures

## 5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

**Surrounding fires**: Use water spray or fog for cooling exposed containers.

# 5.2. Special hazards arising from the substance or mixture

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**Hazardous combustion products**: Under fire conditions, hazardous fumes will be present.

# **5.3.** Advice for fire-fighters

**Protection against fire**: Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures**: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

#### 6. Accidental release measures

# **6.1.** Personal precautions, protective equipment and emergency procedures

For emergency responders: Equip cleanup crew with proper protection.

Ventilate area.

**Technical measures**: Use special care to avoid static electric charges.

**Special precautions**: Remove ignition sources. No naked lights. No smoking.

For non-emergency personnel: Evacuate unnecessary personnel.

# **6.2.** Environmental precautions

**Environmental precautions**: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

# 6.3. Methods and material for containment and cleaning up

**Clean up methods**: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

#### **6.4.** Reference to other sections

See section 8. Exposure controls/personal protection

## 7. Handling and storage

## 7.1. Precautions for safe handling

**Handling**: Handle empty containers with care because residual vapours are flammable. Take precautionary measures against static discharge. Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

**Technical protective measures**: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment. Use only nonsparking tools.

**Special precautions**: No naked lights. No smoking. Avoid breathing dust, fume, gas, mist, vapours, spray.

## 7.2. Conditions for safe storage, including any incompatibilities

**Storage**: Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly

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closed.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

Heat sources.

**7.3. Specific end use(s) Specific end use(s)** : None.

## 8. Exposure controls/personal protection

# 8.1. Exposure controls

**Personal protection**: Avoid all unnecessary exposure.

- **Respiratory protection**: In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others: When using, do not eat, drink or smoke.

# 8.2. Control parameters

Occupational Exposure Limits : No data available.

#### 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Liquid.

Odour threshold : 0.1 ppm
pH value : No data available.

Melting point [°C] : -78 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : 313°C

Auto-ignition temperature [°C] : 300 °C

Flammability (solid, gas) : Flammable.

Flammable liquid and vapour.

Flash point [°C]: 33°C

Boiling point [°C]: 137.5°C

Initial boiling point [°C]: N/A

Final boiling point [°C]: N/A

Evaporation rate: N/A

Vapour pressure [20°C] : 0.4 kPa Vapour pressure mm/Hg : N/A

Vapour density: 3 Density [g/cm3]: 0,8146

Relative density, gas (air=1): 3,04

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Relative density, liquid (water=1): N/A

Solubility in water [% weight]: 22.8 g/l at 25 °C

**Solubility in water**: N/A

Log Pow octanol / water at 20°C : No data available.

**Solubility**: 7

Viscosity at 40°C [mm2/s]: N/A

**9.2. Other information Explosive properties**: N/A

Explosion limits - upper [%]: 10,00% Explosion limits - lower [%]: 1,20% Oxidising properties: No data available.

## 10. Stability and reactivity

10.1. Reactivity

**Reactivity**: Not established. **10.2. Chemical stability** 

Chemical stability: Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions Hazardous reactions** : Not established.

10.4. Conditions to avoid

**Conditions to avoid**: Direct sunlight. Extremely high or low temperatures. Open flame.

Overheating. Heat. Sparks. **10.5. Incompatible materials** 

Materials to avoid: Strong acids. Strong bases.

10.6. Hazardous decomposition products

**Hazardous decomposition products**: Fumes. Carbon monoxide. Carbon dioxide.

May release flammable gases.

## 11. Toxicological information

## 11.1. Information on toxicological effects

**Acute toxicity** 

• Inhalation : Harmful if inhaled.

• **Dermal**: Based on available data, the classification criteria are not met.

• **Ingestion**: Based on available data, the classification criteria are not met.

**Corrosion**: Based on available data, the classification criteria are not met.

**Irritation**: Causes skin irritation. May cause respiratory irritation.

**Sensitization**: Based on available data, the classification criteria are not met.

**Mutagenicity**: Based on available data, the classification criteria are not met. **Carcinogenicity**: Based on available data, the classification criteria are not met.

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**Toxic for reproduction**: Based on available data, the classification criteria are not met. **STOT-single exposure**: Based on available data, the classification criteria are not met. **STOT-repeated exposure**: Based on available data, the classification criteria are not met.

**Aspiration hazard**: Based on available data, the classification criteria are not met.

# 12. Ecological information

12.1. Toxicity

**Toxicity information**: Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential**: Not established.

12.4. Mobility in soil

**Mobility in soil**: Not established.

12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment**: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions**: Avoid release to the environment.

## 13. Disposal considerations

## 13.1. Waste treatment methods

**General**: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions**: Handle empty containers with care because residual vapours are flammable.

## 14. Transport information

**14.1. Land transport (ADR-RID) Proper shipping name**: PENTANOLS

UN N°: 1105 H.I. nr: 33 ADR - Class: 3

**Labelling - Transport**: 3 : Flammable liquid.

**ADR - Classification code** : F1

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**ADR - Group** : II

**ADR - Packing instructions**: P001 R001

**ADR - Limited Quantity**: 1 L

**ADR - Tunnel code**: D/E: Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

**Proper shipping name**: PENTANOLS

**UN N°**: 1105

**IMO-IMDG - Class or division**: 3: Flammable liquid.

**IMO-IMDG - Packing group** : II

IMO-IMDG - Packing instructions: P001 IMO-IMDG - Limited quantities: 1 L IMO-IMDG - Marine pollution: No

**EMS-Nr** : F-E S-D

14.3. Air transport (ICAO-IATA) [English only]

**Proper shipping name**: PENTANOLS

**UN N°: 1105** 

**IATA - Class or division**: 3: Flammable liquid.

IATA - Packing group : II

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing: 353

instruction

- Passenger and Cargo - Maximum : 5 L

**Quantity/Packing** 

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 364- Cargo only - Maximum Quantity/ : 60 L

**Packing** 

**IATA - Limited Quantites**: 1 L

ERG-Nr: 3L

#### 15. Regulatory information

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

**Safety, health and environmental**: Ensure all national/local regulations are observed. **regulations/legislation specific for the substance or mixture** 

**REACH Restrictions - Annex XVII**: The components of this product are not subject to restrictions.

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**REACH Authorisation - Annex XIV**: The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

## 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

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