

# Material Safety Data Sheet



N-METHYL - 2- PYRROLIDONE LR 98%

VERSION : 02  
DATE OF ISSUE : 26-08-2019  
SUPERSEDES : 01

Product Code : 16270

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

### 1.1. Product identifier

Trade name : N-METHYL 2-PYRROLIDONE LR 98%

Product code : 16270

Identification of the product : N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone

CAS No :872-50-4

Chemical formula : C<sub>5</sub>H<sub>9</sub>NO

### 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](mailto: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 : Repr. Cat. 2; R61

Xi; R36/37/38

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

Health hazards : Reproductive toxicity - Unborn Child - Category 1B - Danger (CLP : Repr. 1B)

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

Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

### 2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : T : Toxic



R Phrase(s) : R61 : May cause harm to the unborn child.

R36/37/38 : Irritating to eyes, respiratory system and skin.

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**S Phrase(s)** : S53 : Avoid exposure - obtain special instructions before use.  
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

## Labelling Regulation EC 1272/2008 (CLP)

### Hazard pictograms



**Signal words** : Danger

**Hazard statements** : H360D: May damage the unborn child.

H319 : Causes serious eye irritation.

H315 : Causes skin irritation.

H335 : May cause respiratory irritation.

### Precautionary statements

- **General** : P201: Obtain special instructions before use.
- **Prevention** : 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.

P264: Wash thoroughly after handling.

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

P308+P313: If exposed or concerned : get medical advice.

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

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

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

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

P363: Wash contaminated clothing before reuse.

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

P405: Store locked up.

- **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.

**Special labelling** : Restricted to professional users.

### 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.

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### **3. Composition/information on ingredients**

**Substance / Preparation** : N-methyl-2-pyrrolidone

CAS No :872-50-4

Substance.

Substance name	Contents	CAS No
N-methyl-2-pyrrolidone	100 %	872-50-4

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

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

**Eye contact** : Get medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists :

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

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

**Symptoms relating to use** : May damage the unborn child. Causes serious eye irritation. 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 exposed or concerned : get medical advice.

### **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**

**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.

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## **6. Accidental release measures**

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

**For emergency responders :** Equip cleanup crew with proper protection.

Ventilate area.

**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. Collect spillage. Store away from other materials.

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

See section 8. Exposure controls/personal protection

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

**Handling :** Wash thoroughly after handling.

Wash thoroughly after handling. Obtain special instructions before use. Use only outdoors or in a well-ventilated area.

**Technical protective measures :** Provide good ventilation in process area to prevent formation of vapour.

**Special precautions :** 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 container tightly closed.

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

### **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 :** Wear approved mask.
- **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.

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## **9. Physical and chemical properties**

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

Physical state at 20 °C : Liquid.

Odour threshold : No data available.

pH value : No data available.

Melting point [°C] : -24 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : N/A

Flammability (solid, gas) : N/A

Flash point [°C] : 91 °C

Boiling point [°C] : 202 °C

Initial boiling point [°C] : N/A

Final boiling point [°C] : N/A

Evaporation rate : N/A

Vapour pressure [20°C] : 0.39 - 0.43 hPa at 2

Vapour pressure mm/Hg : N/A

Vapour density : 3,42

Density [g/cm<sup>3</sup>] : 1,028

Relative density, gas (air=1) : N/A

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

Solubility in water [% weight] : Miscible with water

Solubility in water : N/A

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

Solubility : 7.7 - 8.0

Viscosity at 40°C [mm<sup>2</sup>/s] : N/A

### **9.2. Other information**

Explosive properties : N/A

Explosion limits - upper [%] : 9,50%

Explosion limits - lower [%] : 1,30%

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.

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## 10.4. Conditions to avoid

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

## 10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

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

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

- **Inhalation** : Based on available data, the classification criteria are not met.
- **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 serious eye 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.

**Toxic for reproduction** : May damage the unborn child.

**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.

## 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.

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## **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.

## **14. Transport information**

### **14.1. Land transport (ADR-RID)**

**General information** : Not regulated.

### **14.2. Sea transport (IMDG) [English only]**

**General information** : Not regulated.

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

**General information** : Not regulated.

## **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** : With the exception of those listed below:

The components of this product are not subject to restrictions.

**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.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 **DISCLAIMER OF LIABILITY** The information in this SDS was

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## **End of document**

**Prepared by: MOLYCHEM (INDIA)**

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