



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

**Product name:** 1-(2-Hydroxyethyl)pyrrolidine  
**Product code:** H0479  
**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
**Address:** No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China  
**Responsible Department:** Sales Department  
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**Revision number:** 1

## 2. HAZARDS IDENTIFICATION

### Classification of the GHS

#### PHYSICAL HAZARDS

Flammable liquids

Category 3

#### HEALTH HAZARDS

Not classified

#### ENVIRONMENTAL HAZARDS

Not classified

### GHS label elements

#### Pictograms or hazard symbols



#### Signal word

Warning

#### Hazard statement

Flammable liquid and vapour

#### Precautionary statements

##### [Prevention]

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against ignition by the static discharge and the spark.

Wear protective gloves/eye protection/face protection.

##### [Response]

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

##### [Storage]

Store in a well-ventilated place. Keep cool.

##### [Disposal]

Dispose of contents/container through a waste management company authorized by the local government

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture:** Substance  
**Component(s):** 1-(2-Hydroxyethyl)pyrrolidine  
**Percent:** >97.0%(GC)  
**CAS Number:** 2955-88-6  
**Synonyms:** 1-Pyrrolidineethanol  
**Chemical Formula:** C<sub>6</sub>H<sub>13</sub>NO

## 4. FIRST AID MEASURES

### Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

#### 4. FIRST AID MEASURES

- Skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.
- Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

#### 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Dry chemical, foam, carbon dioxide.
- Extinguishing media not to be used:** Water (It may scatter and spread fire.)
- Specific hazards:** Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
- Specific methods:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so.
- Special protective equipment for firefighters:** When extinguishing fire, be sure to wear personal protective equipment.

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Environmental precautions:** Prevent product from entering drains.
- Methods and materials for containment and cleaning up:** Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- Prevention of secondary hazards:** Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

#### 7. HANDLING AND STORAGE

##### Handling

- Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling.  
Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.
- Advice on safe handling:** Avoid contact with skin, eyes and clothing.

##### Storage

- Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store away from incompatible materials such as oxidizing agents.
- Packaging material:** Law is followed.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.
- Personal protective equipment**
- Respiratory protection:** Vapor respirator. Follow local and national regulations.
- Hand protection:** Protective gloves.
- Eye protection:** Safety glasses. A face-shield, if the situation requires.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Skin and body protection:** Protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Physical state (20°C):</b>        | Liquid                  |
| <b>Form:</b>                         | clear                   |
| <b>Color:</b>                        | Colorless - Pale yellow |
| <b>Odor:</b>                         | No data available       |
| <b>pH:</b>                           | No data available       |
| <b>Melting point/freezing point:</b> | No data available       |
| <b>Boiling Point/Range:</b>          | 187 °C                  |
| <b>Flash Point:</b>                  | 56°C                    |
| <b>Explosive limits</b>              |                         |
| <b>Lower:</b>                        | No data available       |
| <b>Upper:</b>                        | No data available       |
| <b>Density:</b>                      | 0.98                    |
| <b>Solubility:</b>                   | No data available       |

## 10. STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Stability:</b>                        | Stable under proper conditions.                        |
| <b>Reactivity:</b>                       | No special reactivity has been reported.               |
| <b>Incompatible materials:</b>           | oxidizing agents                                       |
| <b>Hazardous Decomposition Products:</b> | Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx) |

## 11. TOXICOLOGICAL INFORMATION

|                                       |                   |
|---------------------------------------|-------------------|
| <b>Acute Toxicity:</b>                | No data available |
| <b>Skin corrosion/irritation:</b>     | No data available |
| <b>Serious eye damage/irritation:</b> | No data available |
| <b>Germ cell mutagenicity:</b>        | No data available |
| <b>Carcinogenicity:</b>               |                   |
| <b>IARC =</b>                         | No data available |
| <b>NTP =</b>                          | No data available |
| <b>Reproductive toxicity:</b>         | No data available |

## 12. ECOLOGICAL INFORMATION

|   |                   |
|---|-------------------|
| <b>Ecotoxicity:</b>                               |                   |
| <b>Fish:</b>                                      | No data available |
| <b>Crustacea:</b>                                 | No data available |
| <b>Algae:</b>                                     | No data available |
| <b>Persistence / degradability:</b>               | No data available |
| <b>Bioaccumulative potential(BCF):</b>            | No data available |
| <b>Mobility in soil</b>                           |                   |
| <b>log Pow:</b>                                   | No data available |
| <b>Soil adsorption (Koc):</b>                     | No data available |
| <b>Henry's Law constant(PaM<sup>3</sup>/mol):</b> | No data available |

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## 14. TRANSPORT INFORMATION

**Hazards Class:** 3: Flammable liquid.

#### 14. TRANSPORT INFORMATION

**UN-No:** 1993  
**Proper shipping name:** Flammable liquid, n.o.s.  
**Packing group:** III

#### 15. REGULATORY INFORMATION

**Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002):** Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

#### 16. OTHER INFORMATION

**The reference company name of written contents**

**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
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