Technical Data Sheet

2-Pyrrolidone

Product Information

- Chemical Name: 2-Pyrrolidone
- CAS #: 616-45-5
- Formula: C₄H₇NO
- Molecular Weight: 85.1
- Synonyms: Butyrolactam; G-Butyrolactam; Gamma-Butyrolactam; 2-Pyrrolidone; 2-Azacyclopentanone

Description

2-pyrrolidone is a colorless to slightly yellow liquid above 25°C, with a faint amine odor. It is a high-polar solvent and it is miscible with water and conventional organic solvents. It is miscible with a wide variety of other solvents including water, ethanol, diethyl ether, chloroform, benzene, ethyl acetate and carbon disulfide.

Physical Properties

- Melting point, °C: 23-25
- Boiling range, °C: 245
- Density @ 20°C, g/cm³: 1.12
- Flash point, °C: 230 °F (110 °C)

Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless liquid</td>
</tr>
<tr>
<td>Assay, % min.</td>
<td>99.5</td>
</tr>
<tr>
<td>Water, % max.</td>
<td>0.10</td>
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<tr>
<td>PH(10% Solution)</td>
<td>8.5-10</td>
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</tbody>
</table>
Safety

May cause irritation to eyes, skin and respiratory systems. Avoid contact with strong acids and oxidizing agents.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety.

Applications

Intermediate used in/as:
- Formulation aids
- Industrial chemicals
- Initial product for chemical syntheses
- Pharmaceuticals
- Solvent for inks

Recommended Use

To produce synthetic resin
To produce pesticide
To produce polyvalent alcohol
To produce polyvinylpyrrolidone
To produce polyamide-4 fiber
To produce piracetam
To produce printing inks and coatings

Packaging

200kg per iron drum.
16mt per 20ft container

Storage & Handling

2-Pyrrolidone has a shelf life of 12 months in unopened, original containers, stored below 30°C but above 25°C. It must be protected from fire and sources of ignition. The container should be kept dry as the product is hygroscopic.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

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