Dow offers a range of solvents to address the needs of the highly regulated pharmaceutical industry.

- With Dow’s global sourcing, all of your manufacturing locations can receive the same high quality product with every order.
- Selected products are manufactured to Current Good Manufacturing Practices (cGMP), and meet additional requirements from the appropriate governing bodies.
- Industrial grades are also available with impurities disclosed upon request.

<table>
<thead>
<tr>
<th>Product</th>
<th>Compliance</th>
<th>Key physical properties</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Phenoxyethanol / DOWANOL™ EP<h> NF | NF          | CAS: 122-99-6  
Boiling point: 244°C  
Flash point: 121°C  
Solubility in water: 2.5 wt% | • Slow evaporation  
• High solvency                                                 |
Boiling point: 82.3°C  
Flash point: 12°C  
Solubility in water: ∞ | • Fast evaporating  
• Good solvency  
• Low density                                                      |
| Propionic acid FCC             | FCC         | CAS: 79-09-4  
Boiling point: 140.8°C  
Flash point: 52°C  
Solubility in water: ∞ | • Approved for human consumption  
• Various grades to meet regulatory standards                      |
| Valeric acid ultrapure         | Detailed impurity profile available. | CAS: 109-52-4  
Boiling point: 185.5°C  
Flash point: 84°C  
Solubility in water: 2.4 wt% | • Reduced impurities compared to industrial grade                 |

These are typical properties, not to be construed as specifications.
Re-imagine how you work with your solvent supplier

- Maintain low impurity levels throughout processing by sourcing your solvents from Dow.
- Need to have trace impurities identified? Talk with a member of Dow's technical team today.

Other industrial solvents available

<table>
<thead>
<tr>
<th>Common names</th>
<th>CAS #</th>
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</thead>
<tbody>
<tr>
<td>Diethanolamine, DEA</td>
<td>111-42-2</td>
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<tr>
<td>Disopropylamine, DIPA</td>
<td>110-97-4</td>
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<tr>
<td>CARBITOL™ Solvent, Diethylene Glycol Monoethyl Ether, Ethoxydiglycol</td>
<td>111-90-0</td>
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<td>Ethylenediamine, EDA</td>
<td>107-15-3</td>
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<td>Isobutyl alcohol, Isobutanol</td>
<td>78-83-1</td>
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<tr>
<td>Monoethanolamine, MEA</td>
<td>141-43-5</td>
</tr>
<tr>
<td>Triethanolamine, TEA, Trolamine</td>
<td>102-71-6</td>
</tr>
</tbody>
</table>

Innovation

Dow is committed to collaborating with customers to innovate in the Life Sciences market.
Partner with us today to design your novel product using Dow’s high quality analytical and synthesis capabilities.

High throughput research (HTR)

HTR integrates work flows from chemistry, engineering, analytics, robotics, and more to help deliver solutions faster.
Utilize HTR to determine which formulations maximize drug solubility.

Regulatory & technical support

Dow has decades of experience in the pharmaceutical industry, collaborating with some of the world’s largest companies.
We have regulatory and technical support in nearly every region of the world.

dow.com/en-us/industries/consumer/life-sciences

dow.com

Dow Industrial Solutions

<table>
<thead>
<tr>
<th>US</th>
<th>Toll Free</th>
<th>800 441 4DOW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>989 832 1542</td>
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<table>
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<tr>
<th>International</th>
<th>Europe / Middle East</th>
<th>+ 800 36 94 63 67</th>
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<tr>
<td></td>
<td>Italy</td>
<td>+ 800 783 825</td>
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<td></td>
<td>Asia / Pacific</td>
<td>+ 800 77 76 77 76</td>
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<tr>
<td></td>
<td>South Africa</td>
<td>+ 800 99 5078</td>
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