Treating your unique needs

Get more out of your natural gas operations with specialty solutions and services
Dow offers one of the broadest product portfolios to remove contaminants from natural gas, allowing us to customize selectivity and efficiently treat gas based on your unique specifications. Our UCARSOL™ Solvents and SELEXOL™ Solvents remove $\text{H}_2\text{S}$, $\text{CO}_2$ and trace sulfur and are backed by more than 1,400 references worldwide. Converting an existing amine unit to one of our specialty amine products can help you reduce energy consumption, increase capacity and reduce maintenance costs.

Our technical services can help you further optimize performance, from in-house simulation software and pilot plants to analytical reports available in a simple-to-use online platform. Solvent analyses can include:

- Amine concentration
- Acid gas loadings
- Heat-stable salt concentration
- Foaming tendency
- Ion chromatography for heat-stable salt anions
- ICP and atomic absorption metals analyses
- Gas chromatography
- Corrosion monitoring and other specialized analyses
Specialty products to **meet unique specifications**

<table>
<thead>
<tr>
<th>If you’re looking for...</th>
<th>We recommend...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CO₂ removal</strong></td>
<td><strong>UCARSOL™ AP series</strong> offers a range of products for CO₂ removal that meet your specific gas treating needs, from pipeline to cryogenic specifications, or lower.</td>
</tr>
<tr>
<td><strong>H₂S removal</strong></td>
<td><strong>UCARSOL™ HS series</strong> offers economical, proven options where selective separation of CO₂ and H₂S is required.</td>
</tr>
<tr>
<td>Including acid gas enrichment and tail gas treating</td>
<td><strong>UCARSOL™ Hybrid series</strong> is an innovative option for applications where mercaptan removal is required along with H₂S and/or CO₂ removal.</td>
</tr>
<tr>
<td><strong>Mercaptan removal</strong></td>
<td><strong>SELEXOL™ products</strong> are cost-effective options for those seeking bulk removal of CO₂, H₂S, and trace sulfur.</td>
</tr>
<tr>
<td><strong>Bulk removal</strong></td>
<td><strong>Liquid hydrocarbon treatment</strong> Certain <strong>UCARSOL™ products</strong> are designed to minimize hydrocarbon co-absorption, making them ideal for liquid/liquid treating applications.</td>
</tr>
<tr>
<td>of acid gas</td>
<td></td>
</tr>
<tr>
<td><strong>Liquid hydrocarbon</strong></td>
<td></td>
</tr>
<tr>
<td>treatment</td>
<td></td>
</tr>
</tbody>
</table>

**Specialty services to **optimize performance**

We offer an array of services in addition to the extensive analytical testing described. These complimentary services include:

- Advanced simulation tools to minimize CAPEX at new facilities
- Plant surveys to optimize performance at existing facilities
- Routine analysis, process monitoring, and troubleshooting
- Simple-to-use online platform to access analytical data
- Assistance in establishing testing capabilities at your site
- Access to world class pilot plant
- Operations training
- Emissions management

Contact us for a system evaluation using our proprietary in-house simulation tools. Alternatively, you can model our most commonly used solvents in commercial software packages – ProMax®, a registered trademark of Bryan Research & Engineering, LLC and ProTreat®, a registered trademark of Optimized Gas Treating, Inc.
A product portfolio **beyond solvents**

**Gas treating chelates for redox technology**

When amines are used to remove hydrogen sulfide from natural gas, chelates may be required to convert the resulting concentrated \( \text{H}_2\text{S} \) stream into elemental sulfur. We offer IC chelates and process conditioning agents to help abate the \( \text{H}_2\text{S} \) by direct conversion. Chelates can also be used for the direct removal of low levels of \( \text{H}_2\text{S} \) from natural gas streams for conversion to elemental sulfur.

**UCARKLEAN™ System for efficient cleaning**

We developed our UCARKLEAN™ products as a cost-effective option to remove foulants from your amine unit. Our system removes scale, grease and the hydrocarbon-agglomerated iron sulfide foulant common to amine systems while offering advantages to other cleaning methods today. The UCARKLEAN™ system offers important advantages over other cleaning methods:

- Simple to use—just mix and dilute with water in your system
- Improved cleaning properties for scale, sludge and grease
- Non-flammable and non-caustic
- Contains no heavy metals
- No neutralization or equipment disassembly required
- Smooth, uneventful start-up after cleaning