In transport and handling systems for slurries, it is important to avoid the settling of solids in order to optimize flow through long distances of pipeline. Corrosion management is also important in maintaining operational longevity of slurry transport assets. Dow provides a wide range of solutions to help our customers optimize slurry management, including acrylic polymers that disperse and stabilize mineral slurries, and biocides that protect against microbial induced corrosion (MIC).

The Power of ORE
From increasing cost pressures, to more stringent environmental and safety regulations, to declining ore grades, the mining industry faces numerous challenges impacting profitability. Dow is helping to address these challenges with the Power of ORE – a wide range of products and expertise to address a broad spectrum of mining, mineral processing and remediation challenges.

The Power of ORE gives companies striving to extract more value from mining operations a real choice in the marketplace. Dow can help enable Operational efficiency, boost Recovery enhancement and facilitate Environmental protection.
ACUMER™ Acrylic Polymers

Dow offers its ACUMER™ 9000 Series mineral processing acrylic polymers to disperse and stabilize high-solids mineral slurries. ACUMER™ 9000 Series products will work efficiently with a wide variety of industrial minerals such as calcium carbonate and kaolin. ACUMER™ technology benefits include:

- Stabilized slurries
- Reduced drag
- Improved viscosity
- Reduced yield stress
- Reduced pumping and transportation energy consumption

The table below lists process applications where ACUMER™ 9000 Series products are used.

<table>
<thead>
<tr>
<th>ACUMER™ 9000 Series Product</th>
<th>Dispersant/Stabilizer Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>9000</td>
<td>Magnesium hydroxide and lime slurries</td>
</tr>
<tr>
<td>9141</td>
<td>High-performance polymer for a variety of mineral slurries</td>
</tr>
<tr>
<td>9210</td>
<td>Inorganic pigments in mineral slurries</td>
</tr>
<tr>
<td>9300</td>
<td>Acrylic homopolymer for mineral slurries including kaolin clay</td>
</tr>
<tr>
<td>9310</td>
<td>Variety of mineral slurries</td>
</tr>
<tr>
<td>9320</td>
<td>Low-residual polymer for a variety of mineral slurries</td>
</tr>
<tr>
<td>9341</td>
<td>Cost-effective polymer for high-solids mineral slurries</td>
</tr>
<tr>
<td>9400</td>
<td>High-performance polymer for mineral slurries including kaolin clay, calcium carbonate, talc and lime, pH 7</td>
</tr>
<tr>
<td>9410</td>
<td>High-performance polymer for a variety of mineral slurries, pH 4</td>
</tr>
<tr>
<td>9420</td>
<td>High-performance polymer for a variety of mineral slurries, pH 8</td>
</tr>
<tr>
<td>9460</td>
<td>High-performance polymer for fine calcium carbonate slurries</td>
</tr>
</tbody>
</table>

Mineral slurries often provide an excellent environment for microbes to flourish, and the contamination is often difficult to control with one or two biocides alone due to microbial tolerance issues. The slurries are also often produced under highly alkaline conditions, therefore further limiting the available biocides that are chemically stable or efficacious under these conditions.
**AQUCAR™ Benefits**  
AQUCAR™ antimicrobial products address a number of critical performance needs for today’s mineral slurry producers including:
- Quick kill
- Limited tolerance by microbes
- Stabilized slurries
- Corrosion management

**Dow’s History in the Mining Industry**  
Since our earliest roots isolating compounds from prehistoric brine in the 1890s, to pioneering chemistries for froth flotation processes, to developing innovative technologies for water treatment and reuse today, Dow has continued to innovate to help customers extract more value in the mining industry.

Dow is a world leader in membrane (RO/NF/UF) and ion exchange technologies, and provides a powerful portfolio of chemistries and solutions to address:
- Mine water management, including tailings and waste treatment
- Slurry management
- Dust control
- Grinding and milling
- Flotation and hydrometallurgy, focused on maximizing metal recovery utilizing select chemistries, polymer additives and ion exchange technologies

**Commitment to Sustainability**  
Dow’s commitment to sustainability is infused into the very DNA of our Company. In 2006, we launched our current set of 2015 Sustainability Goals, which focus not only on the Company’s footprint in our own operations but also our handprint through the positive impact of Dow products and their role in global sustainable development. Focused on addressing global challenges like water, food, climate change and energy, Dow has made significant progress against these goals. For more information on how sustainability is integrated into all aspects of our business and operations, please visit www.dow.com/sustainability.

**Product Stewardship and Safety**  
Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.