**Technical Data Sheet**

**PARALOID™ AU-1453 High-Solids Polyol**

For Acrylic/Isocyanate Urethane Coatings

**Introduction**

PARALOID™ AU-1453 High-Solids Acrylic Polyol is designed for low VOC acrylic urethane coatings. Coatings based on PARALOID™ AU-1453 High-Solids Acrylic Polyol are particularly well suited for use where a long-lasting protective topcoat is desired. Applications include automobiles/trucks – parts and refinish applications, railcars, ships, and steel structures. Storage tanks, bridges, and other structures requiring heavy-duty maintenance protection are ideal candidates for PARALOID™ AU-1453 High-Solids Acrylic Polyol. This product is a top performer for 3.5 lbs/gal VOC requirements and may be formulated to 2.8 lbs/gal as well.

**Features and Benefits**

- Extremely low viscosity for its solids content
- Excellent gloss and color retention
- Excellent chemical and solvent resistance
- Fast drying and fast property development
- Long pot life
- Excellent flexibility and impact resistance

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonvolatiles Content, Weight, %</td>
<td>70</td>
</tr>
<tr>
<td>Viscosity, cPs (25°C)</td>
<td>4500</td>
</tr>
<tr>
<td>Solvent</td>
<td>n-Butyl Acetate</td>
</tr>
<tr>
<td>Hydroxyl Equivalent Weight</td>
<td></td>
</tr>
<tr>
<td>Solids Basis</td>
<td>460</td>
</tr>
<tr>
<td>As Supplied</td>
<td>660</td>
</tr>
<tr>
<td>Density, US lb/gal, As Supplied</td>
<td>8.9</td>
</tr>
<tr>
<td>Tg, °C</td>
<td>45</td>
</tr>
<tr>
<td>Molecular Weight (Avg.)</td>
<td>10,000</td>
</tr>
</tbody>
</table>

1. These properties are typical but do not constitute specifications.
Safe Handling Information

The Dow Chemical Company Material Safety Data Sheets (MSDS) contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Under the OSHA Hazard Communication Standard, workers must have access to and understand MSDS on all hazardous substances to which they are exposed. Thus, it is important that you provide appropriate training and information to your employees and make sure they have available to them MSDS on any hazardous products in their workplace.

The Dow Chemical Company sends MSDS on non-OSHA-hazardous as well as OSHA-hazardous products to its customers upon initial shipment, including samples. If you do not have access to one of these MSDS, please contact your local Dow representative for an additional copy.

Updated MSDS are sent upon revision to all customers of record. In addition, MSDS are sent annually to all customers receiving products deemed hazardous under the Superfund Amendments and Reauthorization Act.

MSDS should be obtained from your suppliers of other materials recommended in this bulletin.

Additional safe handling information is available from Dow representatives.

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Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

CAUTION! Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

CAUTION! Failure to maintain proper volume level when using immersion heaters can expose tank and solution to excessive heat resulting in a possible combustion hazard, particularly when plastic tanks are used.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

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.

Customer Notice

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.

Contact:
North America: 1-800-447-4369
Latin America: (+55)-11-5188-9000
Europe: (+800)-3-594-6367
Asia-Pacific: (+800)-7776-7776
http://www.dow.com

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