SilFORT* FHC615 Hardcoat
SilFORT FHC615 thermally cured, thermoformable hardcoat can help protect plastic substrates used in exterior applications. It is an excellent candidate to consider for formable applications where superior weathering and abrasion resistance combined with chemical resistance is required. SilFORT FHC615 hardcoat is supplied as a single component lacquer in a blend of mild glycol-ether solvent and isopropyl alcohol. It is typically used with a primer such as SHP401 to improve adhesion, especially to plastic substrates such as Polycarbonate, PMMA, PET, etc.

Key Features and Typical Benefits
- Thermoformable Transparent
- Protection of high quality optical parts such as windshields & visors Provides easy-to-clean properties
- Adhesion to many plastic substrates with the use of a primer High chemical resistance
- Easy to recycle
- Application by spray, dip, roller and flow Superior weatherability

Typical Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>-</td>
<td>liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>-</td>
<td>Clear, slightly yellow</td>
</tr>
<tr>
<td>Solids Content</td>
<td>%</td>
<td>15-19</td>
</tr>
<tr>
<td>Carrier Solvents</td>
<td>-</td>
<td>1-Methoxy-2-Propanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Isopropyl Alcohol</td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>CSt</td>
<td>4.0-4.8</td>
</tr>
<tr>
<td>Density (@25°C)</td>
<td>Kg/m³</td>
<td>941.9-972.9</td>
</tr>
<tr>
<td>Abrasion Resistance</td>
<td>D haze in %</td>
<td>&lt;= 15</td>
</tr>
<tr>
<td>Water Soak Adhesion</td>
<td>-</td>
<td>&gt;240hrs @65 °C</td>
</tr>
</tbody>
</table>

*SilFORT is a trademark of Momentive Performance Materials Inc.*
Typical performance per ASTMD1044
Adhesion verified per ASTM D3359

Typical properties are average data and are not to be used as or to develop specifications.

Potential Applications
Applications where a combination of formability, abrasion resistance, chemical, and weathering resistance is important

Processing Considerations
Areas where coated, wet parts are handled should be clean and dust-free (Class 1,000 acc. to US Federal Standard 209e or class <6 acc. to ISO 14644-1). If necessary, parts should be washed or wiped clean with an appropriate solvent (eg. Isopropyl Alcohol) followed by an ionized air blow off. Cleanliness is critical for the production of good parts. Both topcoat and primer solutions should be filtered continuously through a 5 to 8 micron pre-filter followed by a gel-filter of <1 micron.

For curing, electric or indirect, gas-fired ovens with good convection and air exchange with an overall temperature variation of +/- 2 °C are recommended.

Packaging
5 Gallon Pail
55 Gallon Drum

Patent Status
Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage
Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers)

*SilFORT is a trademark of Momentive Performance Materials Inc.
may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

**Limitations**

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

**Contact Information**

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*SilFORT* is a trademark of Momentive Performance Materials Inc. 1033

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.
THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*SilFORT is a trademark of Momentive Performance Materials Inc.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.