



SiFORT* Hardcoats
Enabling Plastics, Enabling Innovation

SilFORT* Hardcoats ...Enabling Plastics, Enabling Innovation



SilFORT hardcoats offer customers the ability to replace glass and metal with polymeric substrates in a number of demanding applications. SilFORT products can be used to extend the long-term exterior durability and performance of polymers by helping them maintain their color, gloss, light transmission and physical properties while enhancing their weatherability and resistance to abrasion, chemicals and solvents.

All over the world, SilFORT hardcoat technology is enabling the innovative use of plastic materials in a variety of industries. In the transportation sector, hardcoat-protected plastics can be found in automotive lighting and glazing applications, providing light weight and design flexibility and paving the way for multiple applications in

the fuel efficient automobiles of the future. In architectural applications, hardcoated plastic materials are contributing to energy efficiency and safety. In hand-held mobile devices and display technologies, where both light weight and durability are critical factors, plastics with hardcoat technology are finding their way into touchscreen applications.

The SilFORT portfolio of products brings together more than two decades of advanced, patent-protected hardcoat technology developed by Momentive. In addition, Momentive's highly trained application support team is available to help customers select the optimum products for their needs and develop the application process for achieving best performance. To learn more, please visit momentive.com/SilFORT.

Key Features and Typical Benefits

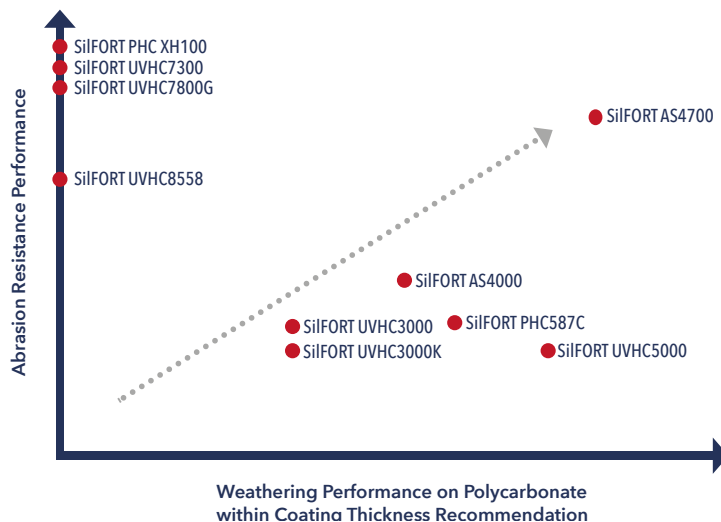
- Offers long term weathering (UV) protection
- Excellent abrasion resistance
- Excellent chemical and solvent resistance
- Excellent gloss protection

Two Cure System Expands Plastic Protection

Our Silicones business is committed to the development of thermal cure hardcoats and UV cure hardcoats, bringing the advantages of silicone hardcoat to a broader range of plastic products. The technology choice depends on key factors such as geometry of the part, substrate material, the product end-use, and other process or downstream considerations. Drawing on extensive application experience, our technical staff can help customers decide on the coating and curing methods that will meet their needs.

Application Methods

We offer a comprehensive line of silicone hardcoats. They can be applied by dip, flow, spray or spin coating methods and can be considered for use with extruded parts, sheet materials or molded products.



HARDCOATS - PRODUCT AND APPLICATION SELECTOR

	Thermal Cure	Thermal Cure-Primerless	UV Cure	Thermal Cure	UV Cure
	With UV Absorber			Without UV Absorber	
AUTOMOTIVE					
Headlamps	SiIFORT* AS4700F	SiIFORT PHC587C(2) SiIFORT PHC587(B)	SiIFORT UVHC5000 SiIFORT UVHC3000 SiIFORT UVHC3000K SiIFORT UVHC8100		
Glazing	SiIFORT AS4700 SiIFORT AS4700F	SiIFORT PHC587C(2)			
Interior		SiIFORT PHC587B	SiIFORT UVHC3000 SiIFORT UVHC7300		
BUILDING AND CONSTRUCTION					
Architectural Sheets	SiIFORT AS4700 SiIFORT AS4000S	SiIFORT PHC587C(2)	SiIFORT UVHC5000 SiIFORT UVHC3000	SiIFORT PHC XH100(P)	SiIFORT UVHC7300 SiIFORT UVHC8558
Architectural Film	SiIFORT AS4000 SiIFORT FHC615		SiIFORT UVHC5000 SiIFORT UVHC3000 SiIFORT UVHC3000K SiIFORT UVHC8100		SiIFORT UVHC7300 SiIFORT UVHC8558
DISPLAY					
Display Films					SiIFORT UVHC7800G SiIFORT UVHC8558
MOLDED PARTS					
Electronics & Appliances Packaging	SiIFORT AS4000	SiIFORT PHC587C(2) SiIFORT PHC587(B)	SiIFORT UVHC3000	SiIFORT PHC XH100(P)	SiIFORT UVHC7300
OPTICAL PARTS					
Safety Glasses		SiIFORT PHC587C(2)	SiIFORT UVHC3000	SiIFORT PHC XH100	SiIFORT UVHC7300
Visors		SiIFORT PHC587(B)	SiIFORT UVHC3000K	SiIFORT PHC XH100	
Ophthalmic					SiIFORT UVHC8558

TYPICAL PHYSICAL PROPERTIES

Thermal Cure	Solids %	Key Features and Typical Benefits
SiIFORT AS4700	25	Highest weatherable, scratch resistant, for black and transparent PC
SiIFORT AS4000S	20	Weatherable, scratch resistant
SiIFORT PHC587B	25	Scratch resistant, weatherable, easy to apply
SiIFORT PHC587C(2)	25	Weatherable, scratch resistant, easy to apply
SiIFORT FHC615	17	Formable, weatherable, decent scratch resistant
SiIFORT PHC XH100	25	Very scratch resistant, easy to apply on PC
SiIFORT PHC XH100P	25	Highly weatherable and scratch resistant coating on PMMA, easy to apply

UV Cure	Solids %	Key Features and Typical Benefits
SiIFORT UVHC5000	45	Highest weatherable UV-cure, for transparent PC
SiIFORT UVHC3000	45	Weatherable UV-cure, highly scratch resistant
SiIFORT UVHC3000K	45	Weatherable UV-cure, scratch resistant, climate-cycle adhesion improved
SiIFORT UVHC7300	60	Physical balance (hardness & flexibility), scratch resistance, low UV-energy-cure system
SiIFORT UVHC7800G	60	High hardness, low curl, printability, scratch resistance, low UV-energy-cure system
SiIFORT UVHC8100	100	Solvent free, weatherable UV-cure, scratch resistant
SiIFORT UVHC8558	100	Solvent free, scratch resistant
SiIFORT UVHC9000	53	Highly weatherable UV-cure, for digital printing

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



www.momentive.com

260 Hudson River Rd,
Waterford, NY 12188 USA

Customer Service Centers

Email: commercial.services@momentive.com

Americas

**Europe, Middle East,
Africa and India**

Asia Pacific

+1 800 295 2392
+1 614 986 2495

00800 4321 1000
+40 213 044229

China:
800 820 0202
+86 21 3860 4892

Japan:
0120 975 400
+81 276 20 6182

All Other Countries:
+60 3 9206 1543

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) 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.

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

Copyright 2016 Momentive Performance Materials Inc. All rights reserved.