

SOLARKOTE[®]

BY ARKEMA



Acrylic Capstock for HIPS



SOLARKOTE H

acrylic capstock-

for HIPS

FEATURES

Impart acrylic-like weatherability and appearance to HIPS sheet and expand your opportunities.

- Vibrant color and gloss
- Long-lasting appearance
- Excellent adhesion to HIPS substrate
- Superior clarity, color and gloss
- Improved economics

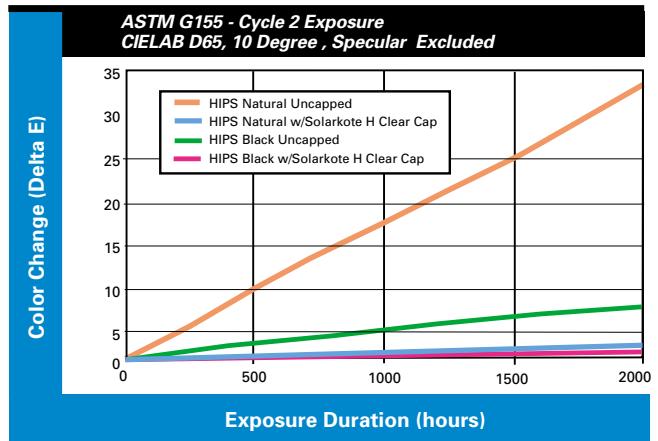
With a Solarkote H acrylic resin cap, HIPS can now withstand nature's elements. Direct application via co-extrusion ensures the highest quality surface at the lowest cost. A co-extruded Solarkote H acrylic resin cap is an economic alternative to laminated films and makes HIPS an excellent low cost alternative to ASA and capped ABS materials for less demanding applications. Typical applications include decorative panels, signs, tub/shower surrounds, patio furniture, building trim and lawn and garden equipment.



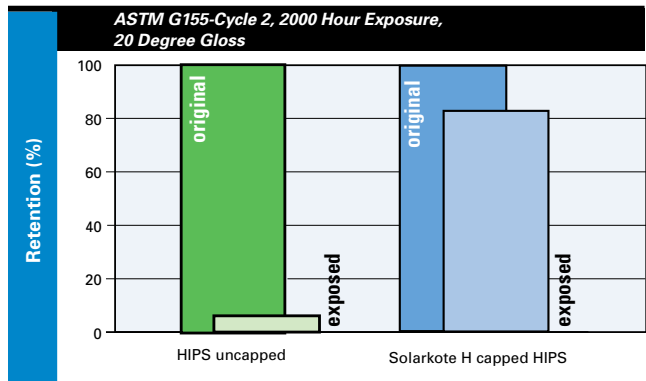
Weatherability/Appearance

Solarkote® H acrylic resin capstock imparts the outstanding weathering and appearance characteristics of acrylic to a HIPS substrate. Solarkote H provides a long-lasting, rich, vibrant color and gloss appearance that is only attainable via direct co-extrusion. The UV protection and durability of the Solarkote H surface greatly extends the service life of HIPS sheet creating an attractive, economic alternative to film laminated HIPS and capped ABS substrates.

Color Retention

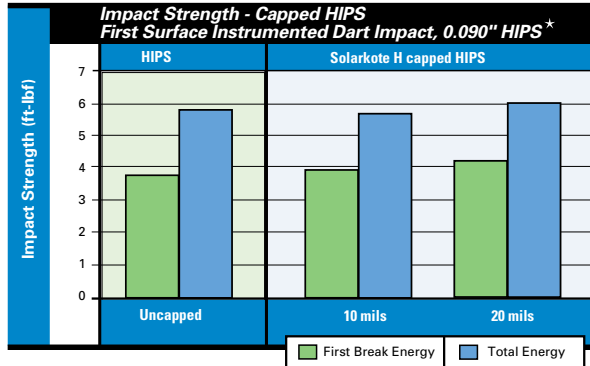


Gloss Retention

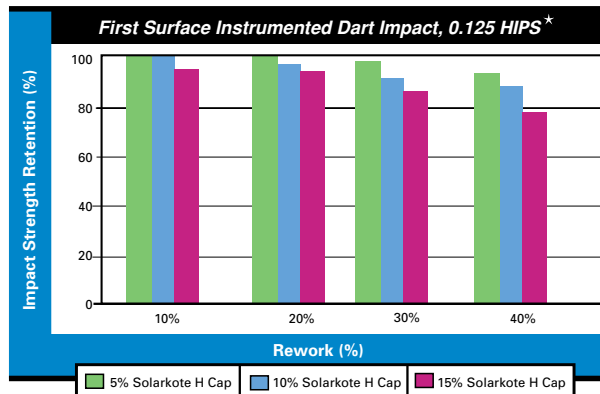


Impact Resistance

Impact Strength - Capped HIPS



Impact Strength - Rework



Solarkote® H acrylic resin capstock provides protection from the UV light normally considered deleterious to HIPS substrates without significant effect on the impact performance of the composite sheet. Greater than 90% of the HIPS initial impact performance is retained with the addition of a 5 to 10% Solarkote H cap. Long-lasting appearance and maximum impact resistance are obtained by maintaining a 6 to 12 mil Solarkote H cap on the finished part.

Minimizing the cap layer thickness provides for optimum economics and regrind performance. 5-10% Solarkote H cap (6 – 12 mil on a 0.120" substrate) provides UV protection with 90% HIPS first surface impact retention at rework levels up to 30%.

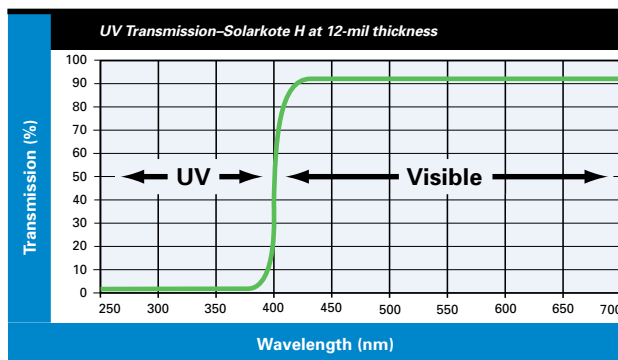
** Although Solarkote H acrylic resin caps will adhere to most styrene substrates, impact and regrind performance will vary with the level of impact modification of the styrene substrate. Application performance testing is recommended.*

Solarkote® H acrylic resin combines enhanced UV screening characteristics with a proprietary acrylic formulation to provide a co-extrudable capstock with excellent adhesion to HIPS substrates. Protection from UV wavelengths normally considered detrimental to HIPS is accomplished with as little as 6 mils Solarkote H thickness maintained on the final part.

Solarkote H is inherently colorless. UV screening performance is accomplished while maintaining high visible light transmission. Transmission of visible light permits application as a clear coat for a high-end, “wet” look. When used as a clear coat, a Solarkote H cap continues to provide UV protection while transmitting visible light. Colorants used in the HIPS substrate intended for clear coat applications need to be “visible light” stable for long term performance.

Solarkote H acrylic resin capstock is readily colored. The transparency of Solarkote H permits full rendition of colorants for a richer, more vibrant appearance than is attainable with conventional cap and film materials. Contact an Altuglas International representative for recommendations on colorants and carrier systems for Solarkote H acrylic resin.

Transmission Characteristics



Physical Properties		
PROPERTY	TEST METHOD	VALUE
Specific Gravity	ASTM D792	1.15
Melt Flow Rate	ASTM D1238	5.0g/10 min
Luminous Transmission	ASTM D1003	88%
Haze	ASTM D1003	< 2%
Gloss 60°/20°	ASTM D523	88/82
Tensile Strength, maximum	ASTM D638	4700 psi
Tensile Elongation, Break	ASTM D638	35.0%
Flexural Strength, maximum	ASTM D790	8000 psi
Flexural Modulus	ASTM D790	250,000 psi
HDT @ 66 psi, annealed	ASTM D648	185° F
Notched Izod Impact	ASTM D256	0.9 ft-lbs/in
Rockwell Hardness	ASTM D785	102 R-scale
Rockwell Hardness	ASTM D785	20 M-scale

Company Contacts

Customer Service
800-523-1532

Technical Service
800-217-3258

Web Site
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www.solarkote.com

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See MSDS for Health & Safety Considerations.

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Solarkote acrylic resin is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

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