

EUROPLEX® Film HC 99716

Product Data Sheet

Product

EUROPLEX® Film HC 99716 is a weather resistant and transparent co-extruded PMMA and PVDF film. It is designed to bring a state of the art UV protection and surface finish for thermoset materials such as High Pressure Laminates.

This film shows excellent performance in long term outdoor weathering without the risk of color change or yellowing.

The PMMA layer is based on a tailor made PMMA resin that provides excellent chemical adhesion to melamine resin while the PVDF top layer brings a high level of weatherability as well as a very good chemical resistance, anti-soiling, anti-fouling and easy to clean properties including graffiti.

Application

Due to its very good chemical adhesion to melamine resin combined with its excellent UV and weather resistance, EUROPLEX® Film HC 99716 is suitable to be used as top layer on panels of exterior grade compact laminates.

Processing

The EUROPLEX® Film HC 99716 is directly applied during the manufacturing process of the panels. No additional equipment, process step or adhesive is necessary.

Standard process temperatures of 145°C to 155°C as well as standard process pressures of 70 to 100 bars are perfectly compatible with the integration of our films and the achievement of the proper chemical bonding.

Sales range

EUROPLEX® Film HC 99716 is delivered in standard rolls of 50µm thickness, 45µm PMMA layer and 5µm PVDF top layer and 1330mm width.

Tailor made rolls can be produced under prior commercial agreement.

Technical data

| Properties | Test method | Unit | Value |
|--|--|-------------------|---------------------------|
| Optical | | | |
| Luminous transmittance τ_{D65} | ISO 13468-2 | % | 93 |
| UV transmittance (280 – 380 nm) | DIN EN 410:2011 | % | < 2 |
| Refractive Index | ISO 489 | % | - |
| Haze | ASTM D1003 | % | 7,3 |
| Mechanical | | | |
| Tensile stress at yield (σ_y) | ISO 527-3 | MPa | 42 |
| Yield strain (ϵ_y) | ISO 527-3 | % | 6 |
| Nominal strain at break (ϵ_B) | ISO 527-3 | % | ≥ 50 |
| Thermal | | | |
| Glass transition temperature T_g (DSC) | ISO 11357 | ° C | - |
| Miscellaneous | | | |
| Accelerated weathering resistance | ISO 4892-2 method A, cycle 1, 65% RH | h | 8000 No visible change |
| Specific gravity | DIN 53479 | g/cm ³ | 1,2 |
| Surface tension (PVDF side) | DIN 53364 | mN/m | 23 |

* = registered trademark EUROPLEX is a registered trademark of Evonik Röhm GmbH, Darmstadt, Germany.
Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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