PLEXIGLAS®

PLEXIGLAS®
Film

PLEXIGLAS® Film yellow 1F004

Product

PLEXIGLAS® Film 1F004 is a yellow transparent weather resistant acrylic film, especially developed for laminates.

The film shows an excellent performance in longtime outdoor weathering. It provides high protection of laminating systems from degradation caused by UV radiation.

Its very smooth surface leads the film to have an excellent optical quality surface.

Application

PLEXIGLAS® Film 1F004 is recommended for traffic control signs according to different standards like DIN 6171-1 and ASTM D4956-01.

PLEXIGLAS® Film 1F004 can be laminated on different polymeric films and sheets. Laminated decoration films based on PLEXIGLAS® are suitable for a wide range of molding processes such as thermoforming, and insert molding.

Thanks to its excellent optical properties and lamination with pressure sensitive adhesives (PSA), PLEXIGLAS® Film 1F004 is highly recommended for long-term outdoor applications, such as traffic control signs.

Processing

PLEXIGLAS® Film 1F004 can be laminated onto polymeric substrates such as films or extruded sheets based on PVC, PC, ABS, PMMA and ASA by in-line or roll-to-roll heat lamination.

The film can be cut-to-size or die cut.

PLEXIGLAS® Film 1F004 has a good behavior in all printing technologies such as gravure, flexography and digital printing. In most of the cases any pre-treatment or primers are not required.

High quality laminates can also be achieved using PLEXIGLAS® Film 1F004 and other polymeric substrates such as PET, PC, PP, PE and PVC, with the help of pressure sensitive adhesives (PSA) or solvent based adhesives.

Sales range

PLEXIGLAS® Film 1F004 is delivered on rolls, in a thickness of 75 µm and a width of 1270 mm.

Custom-made rolls can be produced under prior commercial agreement.

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Technical data			
Properties	**Test method**	**Unit**	**Value**
Optical			
Color coordinate x (in tranmittance, D65/10°)	DIN EN ISO 11664		0.4943
Color coordinate y (in transmittance, D65/10°)	DIN EN ISO 11664		0.4964
Luminous transmittance (D65/10°)	DIN EN ISO 11664	%	69
UV transmittance (280 – 380 nm)	DIN EN 410	%	< 0.5
Refractive Index	DIN EN ISO 489	%	1.49
Mechanical			
Tensile yield stress (σ_y)	DIN EN ISO 527-3	MPa	47
Yield strain (ε_y)	DIN EN ISO 527-3	%	6
Nominal strain at break (ε_{tB})	DIN EN ISO 527-3	%	> 25
Thermal			
Glass transition temperature Tg (DSC)	DIN EN ISO 11357	° C	100
Miscellaneous			
Accelerated weathering resistance	DIN EN ISO 4892-2, method A, cycle 1	h	5000 No visible change
Density	DIN EN ISO 1183	g/cm³	1.15
Surface tension	DIN ISO 8296	mN/m	40

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® = registered trademark
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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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