

PLEXIGLAS® Film Red 3F005

Product Data Sheet

Product

PLEXIGLAS® Film 3F005 is a red 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 and flatness quality surface.

Application

PLEXIGLAS® Film 3F005 is recommended for traffic control signs according to different standards like DIN 6171-1 and ASTM D4956-01.

PLEXIGLAS® Film 3F005 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.

Due to its good optical property and lamination behavior with pressure sensitive adhesive (PSA), PLEXIGLAS® Film 3F005 can be used as overlay laminates for reflective products for traffic control and guidance signs.

Processing

PLEXIGLAS® Film 3F005 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 3F005 has a good printability behavior in all printing technologies such as gravure, flexography and digital. In most of the cases any pre-treatment or primers are not required.

High quality laminates in between PLEXIGLAS® Film 3F005 and other polymeric substrates such as PET, PC, PP, PE and PVC can be achieved with pressure sensitive adhesives (PSA) or solvent based adhesives.

Sales range

PLEXIGLAS® Film 3F005 is delivered on rolls, in a thickness of 75 µm a width of 1270 mm.

Tailor made rolls can be produced under prior commercial agreement.

Technical data

Properties	Test method	Unit	Value
Optical			
Color coordinate x	DIN 5033		0,5357
Color coordinate y	DIN 5033		0,3628
Luminous transmittance τ_{D65}	ISO 13468-2	%	18,7
UV transmittance (280 – 380 nm)	DIN EN 410:2011	%	< 0,5
Refractive Index	ISO 489	%	1,49
Mechanical			
Tensile stress at yield (σ_y)	ISO 527-3	MPa	56
Yield strain (ϵ_y)	ISO 527-3	%	6,5
Nominal strain at break (ϵ_b)	ISO 527-3	%	40
Thermal			
Glass transition temperatur Tg (DSC)	ISO 11357	°C	110
Miscellaneous			
Accelerated weathering resistance	ISO 4892-2 method A, cycle 1, 65% RH	h	4000 No visible change
Specific gravity	DIN 53479	g/cm ³	1,17
Surface tension	DIN 53364	mN/m	50

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

Evonik is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

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Ref. No. 239-39 July 2015