

# PLEXIGLAS® Film 0F016

## Product Data Sheet

### Product

PLEXIGLAS® Film 0F016 is a high weather resistant, glossy and transparent acrylic film for graphic printings and high quality laminations.

Due to its excellent performance under weathering and UV light exposure, PLEXIGLAS® Film 0F016 does not present color change or yellowing. Therefore it provides high protection of laminating systems from degradation caused by UV radiation.

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

### Application

PLEXIGLAS® Film 0F016 can be used to be printed on as high quality film decoration and then 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.

In labels and tapes, PLEXIGLAS® Film 0F016 can be used as single face layer or clear overlay in laminate systems for high UV and weathering protection. High gloss and quality finishing is achieved.

Due to its good optical property and lamination with pressure sensitive adhesive (PSA), PLEXIGLAS® Film 0F016 is recommended for traffic control signs under long term outdoor application.

Due to its very good optical properties, PLEXIGLAS® Film 0F016 can be used as overlay in high quality ID Cards.

### Processing

PLEXIGLAS® Film 0F016 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.

PLEXIGLAS® Film 0F016 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.

High quality laminates in between PLEXIGLAS® Film 0F016 and other polymeric substrates such as PET, PC, PP, PE and PVC can be achieved with pressure sensitive adhesives (PSA) or solvent based adhesives.

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

### Sales range

PLEXIGLAS® Film 0F016 is delivered in standard rolls of 60 or 75µm thickness, 1270mm width, and 1000mm length.

Tailor made rolls can be produced under prior commercial agreement.

## Technical data

Properties	Test method	Unit	Value
<b>Optical</b>			
Luminous transmittance $\tau_{D65}$	ISO 13468-2	%	92
UV transmittance (280 – 380 nm)	DIN EN 410:2011	%	< 1
Refractive Index	ISO 489	%	1,49
<b>Mechanical</b>			
Tensile stress at yield ( $\sigma_y$ )	ISO 527-3	MPa	47
Yield strain ( $\epsilon_y$ )	ISO 527-3	%	6
Nominal strain at break ( $\epsilon_B$ )	ISO 527-3	%	> 25
<b>Thermal</b>			
Glass transition temperature Tg (DSC)	ISO 11357	°C	101
<b>Miscellaneous</b>			
Accelerated weathering resistance	ISO 4892-2 method A, cycle 1, 65% RH	h	8000 No visible changes
Specific gravity	DIN 53479	g/cm <sup>3</sup>	1,15
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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### Evonik Performance Materials GmbH

Acrylic Polymers

Kirschenallee, 64293 Darmstadt, Germany

[films@evonik.com](mailto:films@evonik.com) [www.plexiglas.net](http://www.plexiglas.net) [www.evonik.com](http://www.evonik.com)

Ref. No. 239-8 July 2015