



# PLEXIGLAS® Film OFOO3

#### **Product**

PLEXIGLAS® Film 0F003 is a UV and weather resistant acrylic film with a matt surface on one side and a glossy surface on the other. It also presents high light transmission.

Due to having two different sides, the film provides flexibility in terms of various finishing effects after printing and/or molding.

The matt finishing side provides anti-blocking effect in printing processes and a light scattering can be achieved when used in illumination applications.

PLEXIGLAS® Film 0F003 also presents a good scratch resistance when compared to other polymeric films.

## **Application**

PLEXIGLAS® Film OFOO3 can be die cut or made cut-to-size, it offers excellent printability, scratch resistance and anti-blocking effect. These properties make PLEXIGLAS® Film OFOO3 a top-notch material in film decoration for forming, back molding or over molding parts such as automotive, household, home appliances and electronic devices

In illumination applications, PLEXIGLAS® Film 0F003 provides a very good combination in between light transmission and light diffusion providing a light scattering effect.

#### **Processing**

High quality graphic printings can be easily achieved by using PLEXIGLAS® Film 0F003. The film can be printed on by screen printing and digital printing technologies, not requiring any pre-treatment such as primers or corona in most of the cases."

The film can be cut to size with die-cut using steel rule dies and column guided tools. By using laser cutting, glossy and shiny edges are achieved.

It can be easily processed by thermo-forming, high stress forming, over molding, and back molding processes.

## Sales range

PLEXIGLAS® Film 0F003 is delivered in standard rolls of 250 µm thickness, 1270 mm width, and 1000 m length.

Tailor made rolls and cut-to-size sheets can be produced under prior commercial agreement.



Technical data			
Properties	Test method	Unit	Value
Optical			
Luminous transmittance (D65/10°)	ISO 13468-2	%	87
UV transmittance (280 – 380 nm)	DIN EN 410:2011	%	< 5
Gloss (60°) matt side	DIN 67530		2.3
Gloss (60°) glossy side	DIN 67530		85
Refractive Index	ISO 489	%	1.49
Mechanical			
Tensile yield stress ( $\sigma_{_{\! y}}$ )	ISO 527-3	MPa	51
Yield strain ( $\mathbf{\mathcal{E}}_{_{\mathbf{y}}}$ )	ISO 527-3	%	13
Nominal strain at break ( $\mathbf{\hat{\epsilon}}_{\mathrm{tB}}$ )	ISO 527-3	%	25
Thermal			
Glass transition temperature Tg (DSC)	ISO 11357	° C	113
Miscellaneous			
Accelerated weathering resistance	ISO 4892-2 method A, cycle 1, 65% RH	h	3000 No visible change
Density	DIN 53479	g/cm³	1.17
Surface tension	DIN 53364	mN/m	50

**POLYVANTIS GmbH** 

Riedbahnstraße 70 64331 Weiterstadt Germany www.plexiglas.de www.polyvantis.com

Semi-finished polymethyl methacrylate (PMMA) products from POLYVANTIS are sold on the European, Asian, African and Australian continents under the registered trademark PLEXIGLAS®, in the Americas under the registered trademark ACRYLITE®, both owned by Röhm GmbH, Darmstadt, or its affiliates. Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments.

The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

<sup>® =</sup> registered trademark