



ACRYLITE®  
Film

## ACRYLITE® Film OF003

### Product

ACRYLITE® Film OF003 is a UV and weather resistant acrylic film with a matte 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 matte finishing side provides anti-blocking effect in printing processes and a light scattering can be achieved when used in illumination applications.

ACRYLITE® Film OF003 also presents a good scratch resistance when compared to other polymeric films.

### Application

ACRYLITE® Film OF003 can be die cut or made cut-to-size, it offers excellent printability, scratch resistance and anti-blocking effect. These properties make ACRYLITE® Film OF003 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, ACRYLITE® Film OF003 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 ACRYLITE® Film OF003. 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

ACRYLITE® Film OF003 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                     |
| <b>Optical</b>                                    |                                      |                   |                           |
| Luminous transmittance (D65/10°)                  | ISO 13468-2                          | %                 | 87                        |
| UV transmittance (280 – 380 nm)                   | DIN EN 410:2011                      | %                 | < 5                       |
| Gloss (60°) matte side                            | DIN 67530                            |                   | 2.3                       |
| Gloss (60°) glossy side                           | DIN 67530                            |                   | 85                        |
| Refractive Index                                  | ISO 489                              | %                 | 1.49                      |
| <b>Mechanical</b>                                 |                                      |                   |                           |
| Tensile yield stress ( $\sigma_y$ )               | ISO 527-3                            | MPa               | 51                        |
| Yield strain ( $\epsilon_y$ )                     | ISO 527-3                            | %                 | 13                        |
| Nominal strain at break ( $\epsilon_{IB}$ )       | ISO 527-3                            | %                 | 25                        |
| <b>Thermal</b>                                    |                                      |                   |                           |
| Glass transition temperature T <sub>g</sub> (DSC) | ISO 11357                            | °C                | 113                       |
| <b>Miscellaneous</b>                              |                                      |                   |                           |
| Accelerated weathering resistance                 | ISO 4892-2 method A, cycle 1, 65% RH | h                 | 3000<br>No visible change |
| Density   | DIN 53479                            | g/cm <sup>3</sup> | 1.17                      |
| Surface tension                                   | DIN 53364                            | mN/m              | 50                        |

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