

# ACRYLITE® Film 0F014

## Product Data Sheet

### Product

ACRYLITE® Film 0F014 is a weather resistant, glossy, and transparent acrylic film for graphic printings and laminations.

Due to its good performance under weathering and UV light exposure, ACRYLITE® Film 0F014 does not present color change or yellowing. Therefore it provides good protection of laminating systems from degradation caused by UV radiation.

Its glossy and smooth surface leads the film to have a high optical quality surface.

### Application

ACRYLITE® Film 0F014 can be used to be printed on as film decoration and then laminated on different polymeric films and sheets. Laminated decoration films based on ACRYLITE® are suitable for a wide range of molding processes such as thermoforming and insert molding.

In labels and tapes, ACRYLITE® Film 0F014 can be used as single face layer or clear overlay in laminated film systems for UV and weathering protection. High gloss and quality finishing is achieved.

Due to its good optical property and lamination with pressure sensitive adhesive (PSA), ACRYLITE® 0F014 is recommended for traffic control signs.

Due to its good optical properties ACRYLITE® 0F014 can be used as an overlay in ID Cards.

### Processing

ACRYLITE® Film 0F014 has excellent printability behavior in all printing technologies such as gravure, flexography and digital. In most cases any pre-treatment or primers are not required.

ACRYLITE® Film 0F014 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.

Laminates in between ACRYLITE® Film 0F014 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

ACRYLITE® Film 0F014 is delivered in standard rolls of 75µm thickness, 1270mm width, and 1000m 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               | 33                         |
| Yield strain ( $\epsilon_y$ )            | ISO 527-3                            | %                 | 6                          |
| Nominal strain at break ( $\epsilon_b$ ) | ISO 527-3                            | %                 | > 50                       |
| <b>Thermal</b>                           |                                      |                   |                            |
| Glass transition temperature $T_g$ (DSC) | ISO 11357                            | °C                | 92                         |
| <b>Miscellaneous</b>                     |                                      |                   |                            |
| Accelerated weathering resistance        | ISO 4892-2 method A, cycle 1, 65% RH | h                 | 5000<br>No visible changes |
| Specific gravity                         | DIN 53479                            | g/cm <sup>3</sup> | 1,13                       |
| Surface tension                          | DIN 53364                            | mN/m              | 50                         |

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