

XTRAFORM ANTIGLARE 65GU

Product Data Sheet

Hardcoated Polycarbonate



DESCRIPTION

XtraForm Antiglare 65GU is a formable hardcoated polycarbonate film designed for deep draw 3D FIM applications. It is available in 250µ thickness with an antiglare textured finish on the hardcoat side and a matt finish (MIK) or a gloss finish (LK) for the second surface. The products are supplied with a peel-mask to protect the antiglare finish and an interleave film to separate the sheets (MIK) or a laminate to protect the second surface (LK).



TYPICAL PROPERTIES

| Property | XtraForm Antiglare 65GU | Test Method |
|--|--|---|
| Gloss level | 65 ± 5 GU @ 60° | ASTM D523 black back printed |
| Haze ¹ | 5.5 ± 2% | ASTM D1003 |
| Clarity ¹ | 83 ± 4% | ASTM D1003 |
| Total luminous transmission ¹ | 92% | ASTM D1003 |
| Colour L* a* b* | 95 -0.9 3 | X Rite SP62 Spectrophotometer unprinted & cured |
| Yellowness | <5 | E313 |
| Thickness | 250 µm | Excluding protective layers |
| Scratch resistance | 10N – Pass | Erichsen scratch rod test |
| Linear abrasion | No wear through coating | FCA 50488/02 |
| Acid/Alkali spot test | No change in appearance | LP-463PB-31-01 |
| Suntan Lotion Test | No colour transfer and no change in coating appearance or strength | LP-463PB-31-01 |

¹ data from coating on a gloss base.



TYPICAL PROPERTIES CONTINUED

| Property | XtraForm Antiglare 65GU | Test Method |
|------------------------|--|--|
| Resistance to alcohol | No change in gloss, no visual change | 9.55842/01 § 2.16 |
| Heat ageing | No adhesion loss or visible change | 168 hours @ 105°C |
| Resistance to humidity | No adhesion loss or change in haptic properties or gloss | 168 hours @ 60°C, 95% RH; 72 hours @ 90°C, 96% RH |

BASE FILM DATA¹

| Property | Data | Test Method |
|------------------------------|-----------------------|-------------|
| Tensile strength | ≥ 60MPa / 23°C | ASTM D882 |
| Water absorption equilibrium | 0.4% | ASTM D570 |
| Specific gravity | 1.2 g/cm ³ | ASTM D792 |
| Elongation at break | ≥ 100% / 23°C | ASTM D882 |

¹Derived from suppliers' literature



PROCESS RECOMMENDATIONS²

| Method | Recommendations |
|---------------------|---|
| Handling | The film must be handled in UV safe conditions at every process stage until the UV cure is complete |
| Printing/Decoration | Second surface decoration can be achieved with a variety of suitable screen printing inks, <u>excluding</u> UV inks. The hard coating will slightly retard the drying of solvent inks. The Ink manufacturer's process recommendations must be used to develop production processes. We do not recommend that baking cycles, in the printing process, exceed 5 hours at 80 degrees Celsius. Colour matching of the ink and film must be undertaken with the protective layers removed ² |
| Forming | In a constant smooth action, remove protective layer on top of the hardcoat surface prior to forming. Use static control measures to prevent contamination. Thermoforming or pressure forming by the Niebling process must be carried out <i>after</i> decoration ² |
| Curing | The formed part must be UV cured immediately after forming to prevent any scratching during subsequent processing ² |
| Cutting | Trimming of the formed part should be carried out with precision matched metal tooling for optimum results ² |
| Inject Moulding | The printed, formed and trimmed part is inserted into a suitably designed injection mould tool cavity and resin injected onto the printed side of the film ² |
| Hazards Warnings | Refer to MSDS |

² Full processing guidelines for printing, cutting, moulding, UV curing & forming are available and must be referred to when designing a process using this product.

Shelf life: 6 months

All properties quoted show typical values.



CONTACT INFORMATION

To confirm this is the most recent issue, please contact MacDermid Autotype

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