

XTRAFORM ANTIGLARE 35GU

Product Data Sheet

Hardcoated Polycarbonate



DESCRIPTION

XtraForm Antiglare 35GU is a formable hardcoated polycarbonate film available in 250µ thickness with a textured finish on the hardcoat side and gloss or matt variants for the second surface. It is designed for deep draw 3D FIM applications and the matt version is ideal for automatic processing.



TYPICAL PROPERTIES

Property	XtraForm Antiglare 35GU	Test Method
Gloss Level	33 ± 5 GU @ 60°	ASTM D523 Black back printed
Haze	20± 5%	ASTM D1003
Clarity	60± 5%	ASTM D1003
Total Luminous Transmission	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

Property	XtraForm Antiglare 35GU	Test Method
Suntan Lotion Test	No colour transfer and no change in coating	LP-463PB-31-01 TL226,PV3964
Resistance to Alcohol	No change in gloss, no visual change	FCA 50457
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 hard coat 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 and 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.



SAFETY & WARNING

MacDermid Autotype recommends that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available from MacDermid Autotype.

WASTE TREATMENT

Prior to using any recommendations or suggestions by MacDermid Autotype for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

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

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US 5,108,530 US 5,733,651 US 5,648,414

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