

Technical data sheet

evguard[®] - MPE

Special high performance multi-layer polyester insert for heavy impact and printed laminated safety glass applications

evguard[®] - MPE is a special polyethylene-terephthalate (PET) based thermoplastic interlayer to provide enhanced stability and strength. evguard[®] - MPE can be printed in UV-Offset, silk-screen and digital printing. This interlayer film has to be used in combination with the evguard[®] - laminating film.

The evguard[®] - laminating film is an ethylene-vinyl-acetate (EVA) based thermoset interlayer for the manufacturing of laminated safety glass. Through processing, it forms a highly cross-linked three-dimensional composite interlayer that provides the strength for laminated safety, security and design glass.

↓ ● Stability*

Ball drop test	DIN EN 356	44.2.MPE(200)	P2A
		44.4.MPE(600)	P4A
	DIN 52338 (6 m height)	44.2.MPE(200)	<i>approved</i>
Miami Dade	TAS 201-94 (Large Missile)	55.4.MPE(800)	<i>approved</i>
Testing of large missile impacts and positive/negative cyclic loads	TAS 203-94 at ± 120 psf (Cycling)	55.4.MPE(800)	<i>approved</i>
American National Standard Institute	ANSI Z97.1 incl. ASTM G 155-05a ASTM D 1003-11 ASTM E 313-10 ASTM E 308-12		<i>approved</i>
Salt spray test (3,000 hours)	ASTM B117 / ISO 9227	44.2.MPE(200)	<i>approved</i>
Freestanding barrier glass	BS 6180	88.2.MPE(200)	<i>approved</i>
Glass railings, free standing	DIN 18008-3, category B, residual carrying capacity AS/NZS 1170	88.2.MPE(200)	<i>approved</i>
		66.4.MPE(600)	<i>approved</i>
Sound reduction	DIN EN ISO 10140-2	44.2.MPE(200)	37 db



Processing

For Thickness range of...	0.200 ... 0.300 mm	0.301 ... 0.800 mm
Minimum temperature	105 °C (220 F)	
Maximum temperature	130 °C (266 F)	140 °C (284 F)
Production process	Vacuum lamination	Vacuum lamination Nip roller / autoclave



☐ Dimensions & Packaging*

Thickness	min. 0.2 mm, max. 0.8 mm	
Width	min. 1,000mm, max. 1,600 mm	Customized dimensions and packaging on individual request
Core	76 mm cardboard core	
Packaging	on a pallet	

* evguard® MPE is available in reels.

↔ Properties*

Composition	PET copolyester, special formulation
Glass transition point	~ 110 °C
Color	colorless transparent glossy
Density	~ 1.2 g/cm ³

* values depend on appropriate lamination



Storage recommendation

Temperature	< 30 °C (85 F)
Humidity	< 80 %
Shelf life	use within 12 months after date of delivery.

Opened rolls have to be protected against direct sunlight and dust.

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Disclaimer

The information about our products and processes is based on extensive research and our considerable experience in the field of applied engineering. We provide this information, which to the best of our knowledge is correct, orally and in writing. In doing so, we do not assume any liability other than the liability agreed upon in the respective individual contract, and we reserve the right to make technical modifications in the course of our product development. However, this shall not release user from its obligation to verify the suitability of our products and processes for its own use. Purchaser's specifications of intended use shall only be binding, if we, at the time of contract conclusion, have confirmed in writing that the delivered goods are suitable for the use intended by Purchaser. This shall also apply to the protection of third party industrial property rights and to applications and processes.

