

## Technical data sheet

# evguard<sup>®</sup> - black-opaque 9005

EVA interlayer for laminated safety, security & architectural glass

evguard<sup>®</sup> - 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 52338	44.2	
	DIN EN 356	44.3	P1A
Pendulum test	DIN EN 12600	44.1	1B1
		33.2	2B2
Resistance against heat, humidity and UV radiation	DIN EN ISO 12543-4	44.1	<i>approved</i>
DiBt – (Germany) – Deutsches Institut für Bautechnik	AbZ (national technical approval) Expertise G-70-21-0003		<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	<i>approved</i>
Sound reduction	DIN EN ISO 10140-2	44.2	37 db

\* officially certified for evguard<sup>®</sup> colorless transparent



### Processing

Minimum temperature	105 °C (220 F)
Maximum temperature	160 °C (320 F)
Production process	Vacuum / Nip-roll – Autoclave lamination



### Dimensions & Packaging

Thickness	min. 0.2 mm, max. 1.14 mm	Customized dimensions and packaging on individual request
Width	min. 800 mm, max. 2,400 mm	
Core	76 mm cardboard core	
Packaging	in cardboard boxes	

Properties	Test method	non cross-linked	cross-linked*
Density	ISO 1183	0.95 – 0.97 g/cm <sup>3</sup>	
Optical appearance		black-opaque matt	black-opaque
Tensile strength	ISO 527-3	MD > 5 N/mm <sup>2</sup> CD > 5 N/mm <sup>2</sup>	MD > 20 N/mm <sup>2</sup> CD > 20 N/mm <sup>2</sup>
Elongation at break	ISO 527-3	MD > 700 % CD > 700 %	MD > 400 % CD > 400 %
Hardness	DIN 53505	> 65 Shore A	
Optical density		ca. 5 (for 0,380 mm)	

\* 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

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