

# BETASEAL™ 1001EM

## Glass Bonding Systems

BETASEAL™ 1001EM is a medium viscosity, high modulus, non conductive, fast curing glass bonding adhesive which requires a primer during the process.

It is a one component, ambient moisture curing adhesive for direct glazing applications. It shows excellent sag and bead stability. Skin formation and curing are dependent on humidity, temperature and application dimension. BETASEAL™ 1001EM has a 3 hour Safe-Drive-Away-Time, crash tested to FMVSS 212 specification with twin airbags.

All DuPont Adhesives products are primarily developed in co-operation with the automobile manufacturers, according to their needs and their specifications, they are approved for the specific applications as defined by the customer. The use of the product other than approved application have to be released in written form by the Technical Service of DuPont Adhesives.

Unless specified otherwise test are conducted at 23°C/50% relative humidity.

### Product information

Color	Black	
Basis	Polyurethane prepolymers	
Density	1.28 - 1.32 g/cm <sup>3</sup>	ISO 845
Solid content	≥95 %	

### Uncured properties

Skinning time	8 - 15 min
Cure rate, after 24h	≥3 mm
Sagging	30 <sup>[1]</sup> °

[1]: On vertical wall tilting (maximum).

### Rheological properties

Press Flow Viscosity	18 - 26 <sup>[2]</sup> g/min
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[2]: 23°C, 4mm / 4bar

### Application technique

Ambient Temperature at application	-10 - 40 °C
Surface Temperature at application	-10 - 40 °C
Adhesive Temperature at application	5 - 45 °C

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### Cured properties

Temperature stability	-40 - 100 °C
Volume resistivity	1E10 Ohm.cm

### Typical mechanical properties

Stress at break	5 MPa	ISO 1798
Strain at break	350 %	ISO 1798
Shear modulus	1.8 - 2.8 MPa	
Lap shear strength, 3 days	≥3.5 MPa	DIN EN 1465
Shore hardness A	55 - 65	DIN 53505

### Storage and stability

Shelf life	9 <sup>[3]</sup> months
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[3]: Shelf life is assured at +5°C to +25°C in unopened containers. Short term storage temperatures: 0°C to +40°C. Minimum shelf life upon dispatch from DuPont production location.

### Characteristics

Compatibility	Glass, Paint
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### Additional information

Adhesives

### Bonding surface preparation

All bonding surfaces must be free of impurities (dirt, dust, water, oil, grease, release agent and similar contaminants). In general surfaces should be primed. Verify compatibility or consult our technical service department.

### Application Equipment

Cartridges, Sausages: Application with a standard 1-component hand-operated, pneumatic or electrical gun with piston bar (no direct air guns!).

Drums, Pails: Robotic pump system possible.

Upon request our application specialists can give support to select the right application system for your application.

### Cleaning

Uncured adhesive residues can easily be removed with BETACLEAN™ 3500. Hardened adhesive residues can only be removed mechanically. Immerse equipment in BETACLEAN™ 3000.



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