POLY MAX® CRYSTAL EXPRESS

UNIVERSAL, CRYSTAL CLEAR ASSEMBLY ADHESIVE AND SEALANT WITH FAST FINAL STRENGTH BUILD-UP

PRODUCT DESCRIPTION

Universal, crystal clear assembly adhesive and sealant based on unique SMP technology, with fast final strength building. For bonding, fixing and sealing almost all (construction) materials on almost all surfaces (both smooth, porous and non-porous surfaces). Extra strong. Crystal clear. Super fast.

FIELD OF APPLICATION

Bonding: e.g. glass, stone, natural stone, concrete, plasterwork, many synthetic materials, wood, chipboard, Trespa®, iron, aluminium, zinc, steel, stainless steel and other metals, ceramic tiles, cork and mirrors. Fixing: e.g. skirting boards, lathing, window sills, doorsteps, roof edges, construction boards, insulation materials, gypsum boards, polystyrene ornaments and decorative frames. Sealing: e.g. skirting boards (synthetics), window frames, stair steps, window sills, doorsteps and drywalls. Also suitable for sealing cracks in walls and ceilings. Not suitable for PE, PP, PTFE and bitumen. When gluing plastics always perform an adhesion test first. Adhesion to plastics can vary depending on the type of synthetic and the quality of the plastic.

PROPERTIES

· Crystal clear
· Very high final bond strength
· Super-fast building of final bonding strength
· Permanently elastic
· Can be used internally and externally
· Paintable (test first)
· Good filling capacity
· Resistant to temperatures between -40 °C and +100 °C
· Water and all-weatherproof
· 100 % adhesive (non-shrinking)
· Also bonds to slightly damp surfaces
· Solvent-free
· Excellent bonding without primer
· Acid-free, odourless

CERTIFICATES & STANDARDS

Certificates	
TÜVRheinland CERTIFIED	TÜV: Approved and certified by TÜV Rheinland on shear strength, tensile strength, elasticity and adhesion to different materials. Certificate TÜV 43168.
GEV-EMICODE EC 1 PLUS very low emission	EMICODE: Classification system (GEV) of emission properties for construction products in indoor areas. EC-1 Plus (Very low emission Plus)

PREPARATION

Working Conditions: Only apply at temperatures between +5 °C and +40 °C.
Surface Requirements: Both parts must be solid, clean, free of dust and grease. Use of primer not required. The surface may be slightly moist.
Tools: Apply cartridge contents using a sealant gun. If necessary, use a rubber mallet to tap lightly.

Our advice is based on extensive research and practical experience. However, in view of the large variety of materials and the conditions under which our products are applied, we assume no responsibility for the results obtained and/or any damage caused by the use of the product. Nevertheless, our Service Department is always at your disposal for any advice needed.

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APPLICATION

Coverage: With spot bonding: 5-8 m²/kg. Stripes: one cartridge issues approx. 8-15 metres of adhesive (depending on the diameter of the cut nozzle).

Directions for use:

Before using open cartridge at the top by cutting off the plastic nipple above the thread with a sharp knife. Fix the nozzle onto the cartridge and cut at an angle to the desired diameter. Bonding and fixing: Cut the nozzle to a diameter of at least 0.5 cm. Sealing: Cut the nozzle at an angle to the desired joint width.

Bonding and fixing: Apply in stripes or dots (every 10 - 40 cm). Always apply to the corners and along the edges of construction boards. Correctly position material within 10 minutes and press firmly or lightly tap with a rubber mallet. If necessary, clamp or fixate heavy materials for 4 hours. Can be handled after 2 hours (the connection is now strong enough to withstand transportation or a light load), maximum final strength after approx. 4 hours, depending on the surface and the ambient conditions. Sealing: Evenly apply to the bottom of the joint and tool within 10 minutes using a moistened (with soapy water without lemon) putty knife, sealant smoother, or finger. Tool the vertical joints from bottom to top. Fully cured after a few days (depending on the thickness of the layer). When painting over with alkyd paint, the paint may dry more slowly.

Stains/residue: Use white spirit for cleaning tools and removing wet adhesive residue. Dry adhesive residue can only be removed mechanically.

Points of attention: The following drying times are based on bonding at least one porous material and an adhesive layer of approx. 1 mm thickness. If two non-porous materials are being bonded and/or the layer of adhesive is thicker, the drying times may be substantially longer. When adhesive is applied underwater, it may turn white. Avoid lasting direct contact with UV radiation (eg. sealing applications outdoors).

TECHNICAL SPECIFICATIONS

100% modulus:	0.9 MPa
Chemical base:	SMP Polymer
Chemicals resistance:	Good
Cure rate:	2.5 mm/24h
Density approx.:	1.04 g/cm³
Elasticity:	Good
Elongation of rupture:	250 %
Filling capacity:	Very good
Final bond strength after:	4 hours. This might vary, based on circumstances, like materials, temperature and humidity.
Hardness (Shore A):	42
Initial Bonding after:	2 hours. This might vary, based on circumstances, like materials, temperature and humidity.
Minimum temperature resistance:	-40 °C
Maximum temperature resistance:	100 °C
Mildew resistance:	Good
Moisture resistance:	Very good
Paintability:	Good
Shear strength:	250 N/cm²
Skinover time:	30-45 minutes
Solid matter approx.:	100 %
Solvent free:	Yes
Tensile strength (N/cm²) approx.:	150 N/cm²
UV resistance:	Moderate
Viscosity:	Pasty
Water resistance:	Good

STORAGE CONDITIONS

Close container properly and store in a dry, cool and frost-freeplace.

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