

Technical Data Sheet



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UniBond No More Nails Crystal Cartridge



CHARACTERISTICS

- Crystal clear appearance
- ➤ High Instant Tack 100 kg/m²
- Correctable for a few minutes
- Excellent workability, no stringing
- Moisture curing
- Fast curing
- Non-slumping
- > Interior and exterior use
- Multiple materials
- Sensitive materials

- Flexible bonding
- Porous and non-porous surfaces
- Easy application at low temperature
- Isocvanate-free
- > Solvent- free
- Gap-bridging
- Sound and vibration damping
- Weather and aging resistant
- Works on damp surfaces (provided surface can dry)
- Overpaintable (water-based paints only)

APPLICATION FIELD

- UniBond No More Nails All Materials Crystal is multiple-substrate compatible including Brick, Ceramic, Concrete, Hardboard, Plasterboard, Plywood, Stone, MDF, Wood, Metal, UPVC, Glass, Plastics*, painted surfaces*, Mirrors**.
- Suitable for absorbent and non-absorbent materials except PE, PP, PTFE, acrylic glass, plasticized PVC, copper and brass. With coated substrates, a check of product suitability or professional advice is recommended. Wet surfaces are possible if it has the possibility to dry. Not recommended for permanent water immersion.
- Joints and seam seals in metallic and wooden construction
- Joints in ventilation & air-conditioning ductwork

*Pre-test to determine suitable bonding, because of many different substrates. The adhesion of UniBond No More Nails All Materials Crystal Clear on polystyrene foam (Styrofoam) can be significantly improved, by priming with diluted wood glue. Mix wood glue about 1:1 with water and spread onto the substrate. After drying the primer, UniBond No More Nails All Materials Crystal Clear is ready to apply

^{**}Use mirrors acc. DIN EN 1036-1, ask for technical advice for large-scale objects.



STANDARDS

GEV EMICODE®: EC 1 PLUS (very low emissions)

VOC emission class (France): A+

EN 15301-1: Reaction to fire: Class E

INSTRUCTIONS FOR USE

Pretreatment

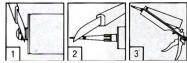
Ensure surfaces to be bonded are clean and free of dust, grease or oil. Pooled water should be removed. Substrates must be stable. Remove any contaminants likely to impair adhesion. Before application, mask off the adjacent area with foil or tape, if necessary. Check paint or coatings are firmly attached, if not remove it.

In cases of unknown materials or critical applications adhesions tests are recommended or contact our Technical Service.

Curing of the adhesive requires the intake of a small amount of moisture (either from the atmosphere and/or from the substrate).

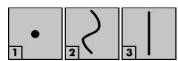
Application

Cut off the tip of cartridge cap above the thread (1). Screw on the plastic nozzle and diagonally cut off the tip of the nozzle (2). Insert the cartridge into a cartridge gun (3).



Opening the plastic cartridge

Apply adhesive onto one of the surfaces: (1) In spots in order to smooth uneven surfaces, (2) in wave-like form for higher initial tack with wide surfaces or (3) in straight strands for smaller surfaces. In case of outdoor use, apply **vertical** strands.



Application of the adhesive

Release the gun trigger after application to prevent the adhesive from running out of the cartridge.

Use hand pressure to set the elements to be bonded into position. If necessary (e.g. heavy items and items under tension), use adhesive tape, wedges, or props to hold the assembled elements together for the initial hours (at least 24 hours) of curing. An incorrectly positioned element can be easily unfastened and repositioned in the first few minutes after application. Apply pressure again. Minimum thickness of the adhesive layer should be 1 mm to ensure ventilation.

<u>Important in case of 2 non-absorbent surfaces</u>: Adhesive must not form continuous areas as contact with air/moisture is necessary for adhesive setting. Make sure the adhesive strands do not merge!



After curing:

When fully cured UniBond No More Nails All Materials Crystal can be painted, water—based acrylic paints are particularly suitable. It is recommended to test the compatibility of a coating product before use. Oxygencuring paints (e.g. alkyd-resin) show longer drying/tackiness. 2K-Epoxy paints show bad levelling property.

Cleaning tools

Fresh adhesive may be cleaned with a cloth soaked in a solvent (alcohol or white spirit). Once fully cured, No More Nails Crystal can only really be removed by mechanical means (i.e. a chisel or similar tool).

TECHNICAL DATA

TECHNICAL DATA	
Uncured product	
Raw material	Flextec®-Polymer (moisture curing silane terminated polymer (STP)
Appearance	Crystal clear
Odour	Mild alcohol
Application temperature:	+5°C to +40°C (substrate and ambient)
Consistency	Non-slumping paste
Density (ISO 2811-1)	~ 1,04 g/cm³
Skin formation time (23°C, 50% r.h.)	~ 15 minutes
Open time	~ 15 minutes
Curing speed (23°C, 50% r.h., bead 20x10mm)	~ 2 mm / 24 hours
Initial tack	~ 10 g/cm² (100kg/m²)
Gap bridging capacity	Up to 20 mm
Cured product	1
Shore A hardness (ISO868)	~ 50
Modulus 100% (DIN 53504, S2)	~ 1,5 N/mm²
Elongation at break (DIN 53504, S2)	~ 175%
Tensile strength (DIN 53504, S2)	~ 2,3 N/mm²
Final Strength (DIN EN 205)	~ 3,0 N/mm² (lap-shear strength, wood/wood)
Service temperature	-30°C up to +70°C
Coverage on flat surfaces	~ 300 g/m² (Approx. 11m using a 5mm bead)
Shrinkage (ISO 10563)	~ -3 %



LIMITATIONS

UniBond No More Nails Crystal is not recommended for applications where the product is exposed to direct sunlight / high UV radiation.

Transparent materials should only be bonded with the product if they are not exposed to sunlight, as this can lead to colour changes.

Colour deviations may occur e.g. due to exposure to chemicals or high temperatures. However, a change in colour does usually not affect adversely the technical performance or the durability.

In case of powder coated substrates (e.g. powder coated aluminum window frames) an adhesion test is recommended before use.

Product may only be used for mirror bonding if the mirror coating and the protective lacquer complies with EN 1036-1. In case of unknown mirror qualities please ask mirror producer for an approval. Do not use UniBond No More Nails Crystal as a sealant, on bituminous substrates or on building materials, which might bleed oils, plasticizer or solvents, which could attack the product.

Not suitable for applications with water pressure or permanent water immersion/constant damp, e.g. in swimming pools below the water line, water pipes.

Will not bond to PE, PP, PTFE, PMMA (Acrylic), plasticized PVC, copper and brass.

Pre-test coated substrates to ensure suitability of use

Product may only be used for mirror bonding if the mirror coating and the protective lacquer complies with EN 1036-1. In case of unknown mirror qualities and large projects, please ask mirror producer for a recommendation.

Storage

Shelf life 15 months from date of production if stored in unopened original tubes, in dry conditions and protected from direct sunlight at temperatures between +5°C and 25°C.

Packaging

280ml PE cartridge (95% recycled plastic)



HEALTH AND SAFETY

Before using the product, please see related Material Safety Data Sheet that is available on request.

"The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. f.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law."

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