

Technical Data Sheet



technicoll® 9414 Transparent 2-component MMA adhesive

Field of application

technicoll® 9414 is suitable for bonding different substrates such as composites, laminations, many thermoplastics, thermosetting polymers, metals and coated surfaces, derived timber products and ceramics.

Special characteristics

technicoll® 9414 is a fast curing, transparent and gap-filling adhesive with high resistance to temperature, ageing and UV-light.

Handling data and product data

technicoll® 9414	technicoll® 9414 A	technicoll® 9414 B	adhesive
Mixing ratio	100	100	
Viscosity			thixotropic
Density	1.0 g/cm ³	1.0 g/cm ³	1.0 g/cm ³
Colour	transparent	transparent	Crystal clear
Base	acrylate		
Pot life (+23 °C)	2 minutes		
Initial strength	after approx. 15 minutes after approx. 35 minutes: 50 % of the final strength is achieved		
Final strength	after approx. 24 hours		
Way of application	one-sided		
Gap filling capacity	approx. 2 mm		
Shore hardness D	ca. 74		
Processing temperature	+15 °C to +25 °C		
Temperature resistance	ca. -40 °C bis +120 °C (depending on substrate and mechanical load. Temporarily higher temperatures are possible when load is low)		
Cleaning agent / material	technicoll® 8363 technicoll® 9901 (metal cleaning spray) technicoll® 9902 (plastics cleaning spray)		
Cleaning agent / tool	technicoll® 8362, technicoll® 9901 (spray)		
Cleaning	Solid adhesive can only be removed mechanically.		
Maximum time of storage	At least 12 months when stored cool and dry in closed original packaging.		
Preferred storage temperature	approx. +4 °C		

Favoured substrates

- metals (aluminium, steel, stainless steel)
- metals - galvanised
- painted and coated surfaces
- thermoplastic polymers: PMMA, ABS, PS, PVC-u, PUR, PETG, PC
- thermosets (GFRP, CFRP, SMC)
- epoxides, polyesters
- ceramics
- concrete, artificial stone, stone, natural stone
- derived timber products
- rubber

Not suitable for: PE, PP, PTFE (Teflon®), POM, silicone, EPDM, PVC-p (faux leather), glass, copper, brass

Due to the large variety of possible materials and differences in adhesion behaviour hazard tests are mandatory before introducing the adhesive into the actual production process.

Surface preparation

Bonding surfaces must be dry and clean, especially free of oil, grease or solvents. In many cases, surface roughening prior to bonding improves strength of bonded joint.

Note

Place the cartridge vertically with the tip up for approx. 3 minutes. This ensures that included air can rise in the cartridge.

Adhesion

Before processing, make sure that the adhesive and the substrates to be bonded have room temperature.

Position cartridge into the bracket of an adequate dispensing gun, lock it and remove cap. Expel a small amount of the adhesive to make sure that both components flow freely. Attach mixing nozzle and lock it. Apply adhesive in a thin bead, drop or film on the surfaces to be bonded. The joint components should be assembled and clamped within the pot life.

The final bonding strength will be achieved after approx. 24 hours at room temperature.

Tensile shear strength [N/mm²] following DIN 1465 (mean value)

PMMA	6.8 N/mm ²	material fracture!
PC	6.7 N/mm ²	material fracture!

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Deviating information of earlier versions is invalid.

Special notice:

All information given on this data sheet is based on our knowledge and experience at the time of printing. The information is not binding. We advise to determine the suitability of our products with respect to their intended use and method of application. Therefore, a warranty claim cannot be granted.