

Technical Data Sheet



technicoll® 9412

Multifunctional, viscoplastic

2-component MMA structural adhesive, paste-like, fast curing

Field of application

Use technicoll® 9412 for a primer less adhesion of different kinds of substrates, e.g. composites, many thermoplastics, metals and coated surfaces.

Special characteristics

- Fast curing and handling strength
- High resistance to temperature, ageing and media
- Gap filling
- Little surface preparation necessary
- High flexibility and high peel strength
- No sagging on vertical surfaces
- Viscoplastic, high resistance to dynamic loads

Data of handling and product

technicoll® 9412	technicoll® 9412 A	technicoll® 9412 B	adhesive
Mixing ratio (volume)	100	100	
Mixing ratio (weight)	105	100	
Base	acrylate	acrylate	
Density	approx. 1.0 g/cm ³	approx. 1.0 g/cm ³	approx. 1.0 g/cm ³
Viscosity	approx. 200 Pas	approx. 150 Pas	paste-like
Colour	amber	yellowish	yellowish
Pot life (+20 °C)	6 minutes		
Initial strength	after approx. 20 minutes		
Way of application	one-sided		
Processing temperature	+15 °C to +25 °C		
Temperature resistance	approx. -40 °C to +120 °C (depending on substrate and mechanical pressure)		
Cleaning	Cured adhesive can only be removed mechanically.		
Maximum time of storage (+4 °C)	At least 9 months when stored in sealed original packaging in cool and dry places.		
Preferred storage temperature	approx. +4 °C		

Favoured substrates

- metals (aluminium, steel, stainless steel)
- concrete, artificial stone
- stone, natural stone
- thermoplastics: PMMA, ABS, PA, PS, PVC-u, PUR, PET, PC
- derived timber products
- thermosets (GRP, CRP, SMC)
- ceramics
- rubber
- epoxides, polyesters

Not suitable for: PE, PP, PTFE (Teflon®), POM, silicone, EPDM, PVC-p (faux leather)
PS-rigid foams (e.g. Styropor®)

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

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

Adhesion

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 time.

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

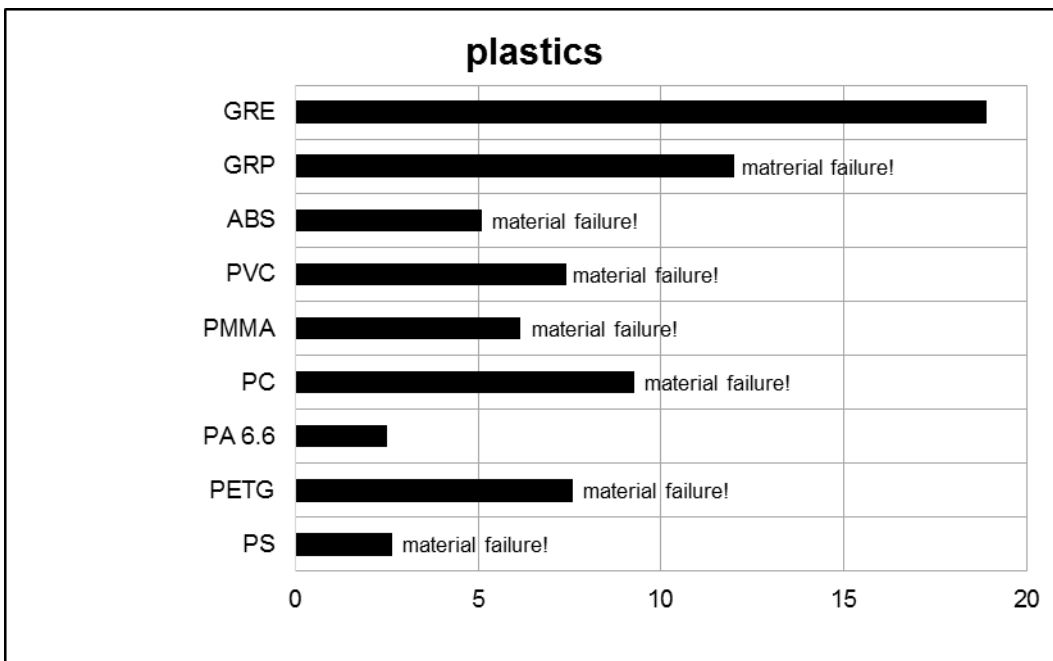
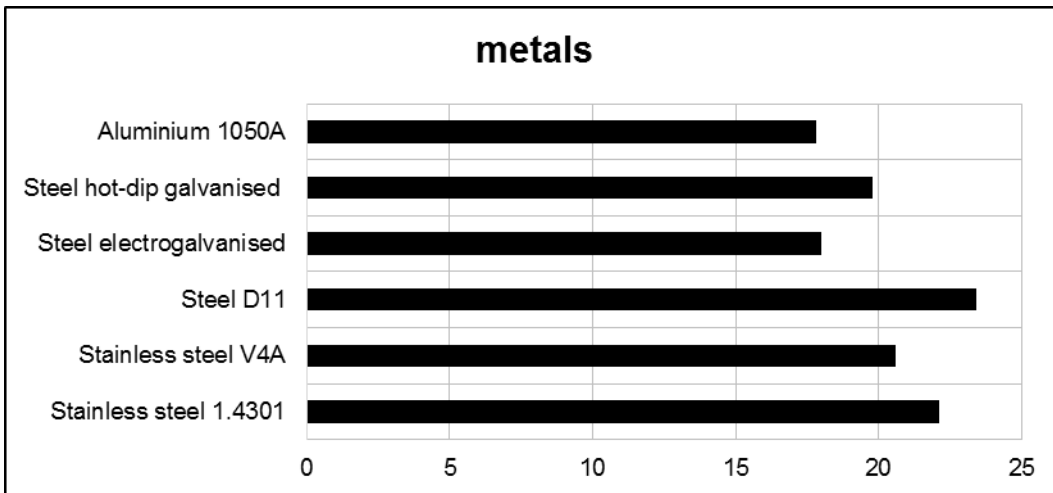
Physical properties of cured adhesive

Shear strength	21 N/mm ²
Elongation of rupture	50 - 75 %
Modulus	690 N/mm ²



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Lap shear strengths [N/mm²] according to DIN 1465 (average value)



Pre-treatment: test specimens cleaned, metals sand blasted. Plastics and galvanised metals lightly roughened. Tested at room temperature.

Technical status: 22.04.2016

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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.