

Technical Data Sheet

technicoll® 9462 2-component epoxy adhesive, fast curing



Special characteristics

- Pot life of 6 minutes and fast curing at room temperature
- Capable of flow, very easy handling
- High strength values for many kinds of substrates and high resistance to humidity and weather influences

Handling and product data

Mixing ratio	technicoll® 9462 A	technicoll® 9462 B	adhesive
Volume	100	100	
Weight	100	100	
Density	1.2 g/cm ³	1.2 g/cm ³	1.2 g/cm ³
Viscosity (+25 °C)	approx. 60 Pas	approx. 30 Pas	ca. 45 Pas
Colour	whitish	bright amber	bright amber
Pot life (+25°C) for 100 g	6 minutes		
Curing time (+25 °C)	1 N/mm ² shear strength after 15 minutes 10 N/mm ² shear strength after 45 minutes		
Processing temperature	+15 °C to +30 °C		
Consumption	150 - 250 g/m ²		
Way of application	one-sided		
Dilution	not possible		
Cleaning agent / material	technicoll® 8363 technicoll® 9901 (metal cleaning spray) technicoll® 9902 (plastics cleaning spray)		
Cleaning agent / tool	technicoll® 8362, technicoll® 9901 (spray)		
Cleaning	Cured adhesive can only be removed mechanically.		
Maximum time of storage	At least 12 months when stored in sealed original packaging in cool and dry places.		
Preferred storage temperature	+10 °C to +25 °C		
Behaviour at low temperature	Not susceptible to frost. Densification at low temperature. Once adjusted to processing temperature: fully employable.		

Favoured substrates

- metals - blank
- ceramics, stone, concrete
- rubber
- thermosets (FRP, SMC), phenoplastics (HPL)
- rigid foams
- derived timber products

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

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.

Physical properties of cured adhesive

Shore hardness D 1	80
Shear strength	45 mPa
Elongation at rupture	3 %
Glass transition temperature T _g	+40 °C
Temperature range (depending on substrate and mechanical load)	approx. -40 °C to +70 °C

Curing 8 h at +80 °C and 48 h at room temperature

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.

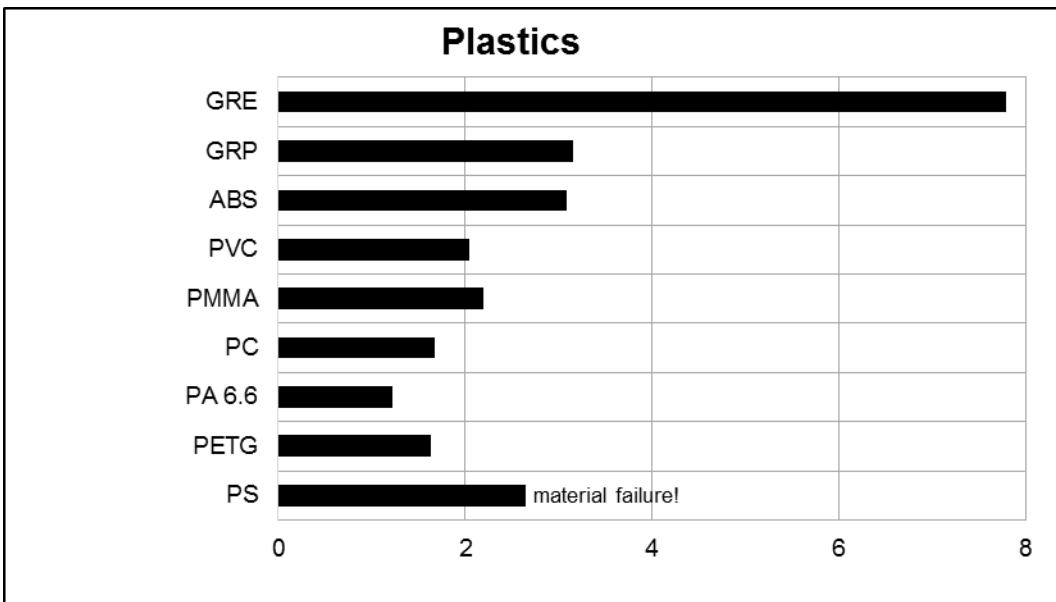
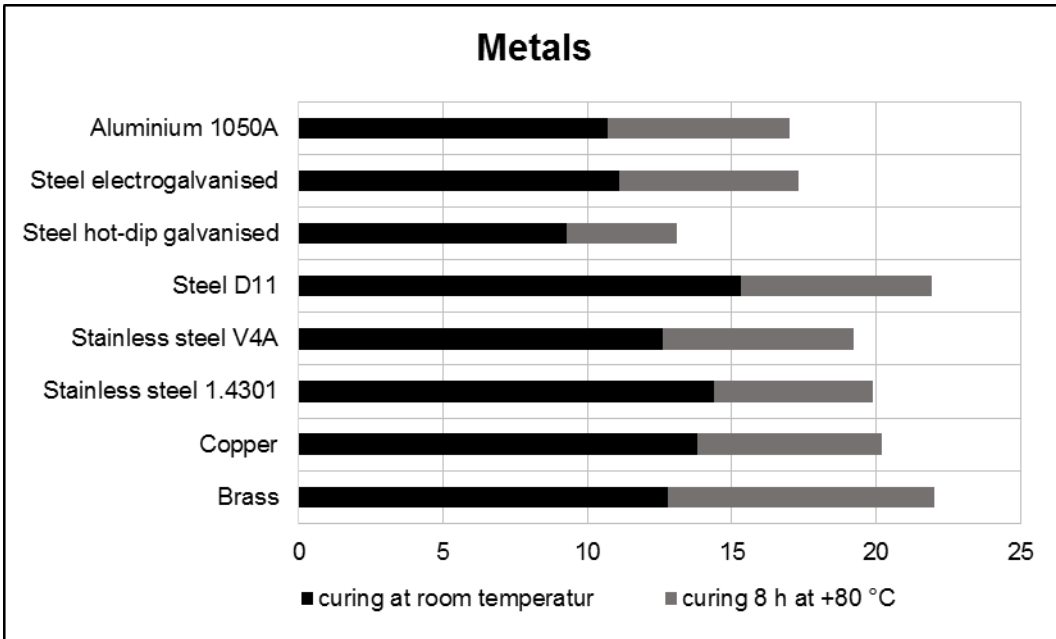
The final bonding strength is achieved after approx. 7 days!

Curing

At room temperature, bonded substrates can be handled after approx. 20 minutes.

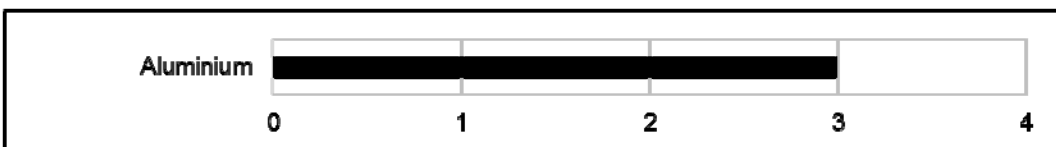
A lap shear strength of 1 N/mm² at +25 °C is achieved after 15 minutes and 50 % of the final strength is achieved at +25 °C after 30 minutes! Curing speed can be increased by heat.

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



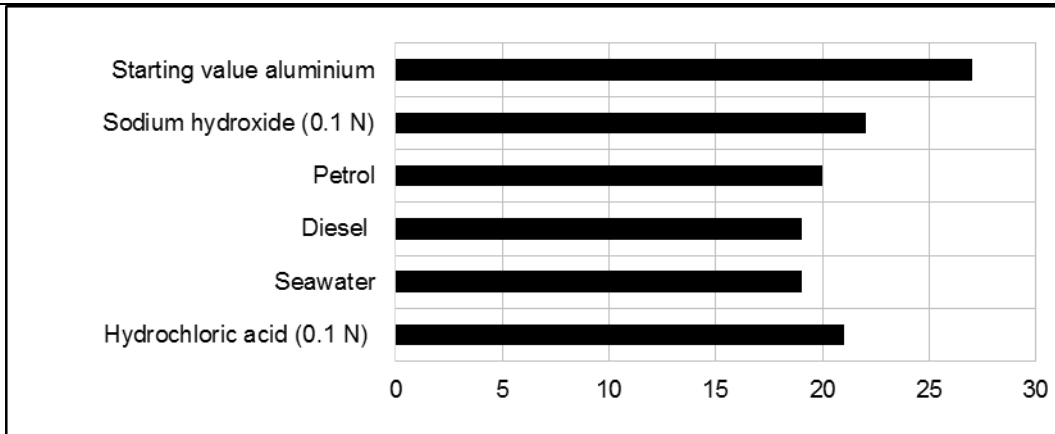
Pre-treatment: test specimens cleaned, metals sand blasted. Plastics and galvanised metals lightly roughened
 Tested at room temperature

Roller peel test [kN/m] (average value)



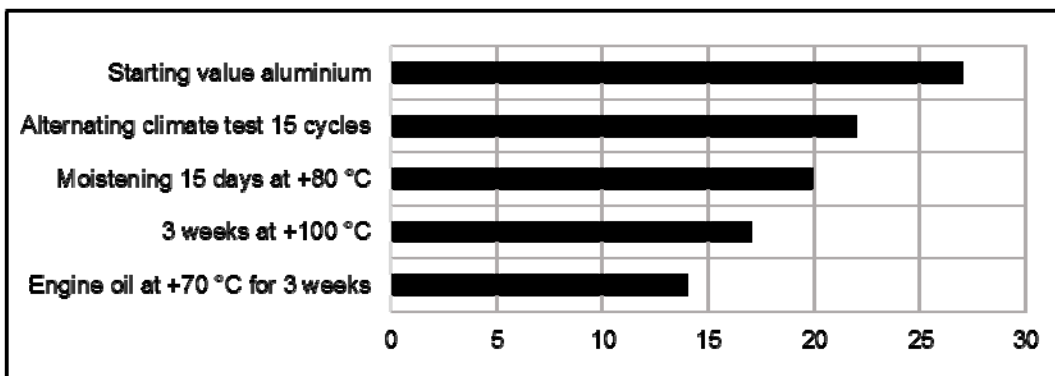
Pre-treatment: aluminium 2017A cleaned, etched. Curing 8 h at +80 °C and 48 h at room temperature.

Lap shear strengths [N/mm²] after ageing 3 weeks (average value)



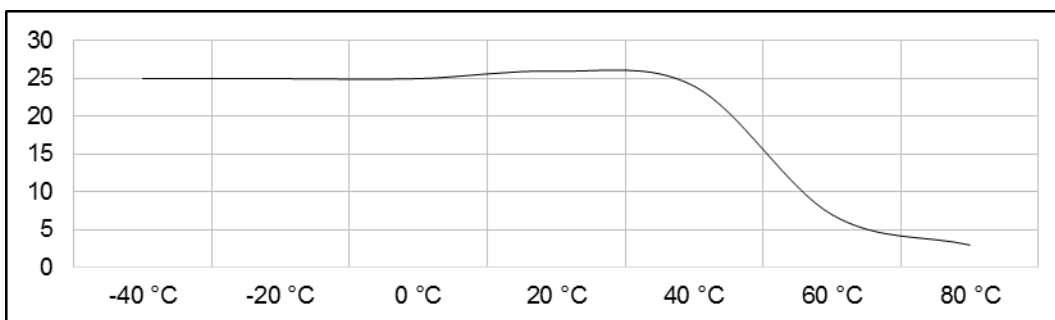
Pre-treatment: aluminium 2017A cleaned, etched. Curing 8 h at +80 °C and 48 h at room temperature.
Tested at room temperature.

Lap shear strengths [N/mm²] after ageing (average value)



Pre-treatment: aluminium 2017A cleaned, etched. Curing 8 h at +80 °C and 48 h at room temperature.
Tested at room temperature.

Lap shear strengths [N/mm²] vs. temperature (average value)



Pre-treatment: aluminium 2017A cleaned, etched. Curing 8 h at +80 °C and 48 h at room temperature.

Technical status: 22.12.2015

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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.