

Technical Data Sheet



technicoll® 9464 2-Component epoxy adhesive, resistant to temperature and chemicals

Special characteristics

- Very high resistance to temperature (up to +150 °C)
- Excellent resistance to ageing and chemicals (e.g. oil, mixture of alkanes, diluted acids)
- Confirms the requirements of self-extinguishing fire behaviour complying with the EN 45545-2 (railway transportation), FAR 25.853 (aerospace standard) and ABD0031 (AITM)
- Low gas emission rate

Range of application

- Motorsports, automotive engineering
- Oil filter elements
- Electronic communication
- Aerospace applications

Handling and product data

Mixing ratio	technicoll® 9464 A	technicoll® 9464 B	adhesive
Volume	100	50	
Weight	100	47	
Density	1.4 g/cm ³	1.3 g/cm ³	1.4 g/cm ³
Viscosity (+25 °C)	approx. 185 Pas	approx. 165 Pas	approx. 180 Pas
Colour	black	creamy	black
Pot life (+25 °C) for 100 g	120 minutes		
Curing time	1 N/mm ² shear strength: 8 hours 10 N/mm ² shear strength: 20 hours		
Processing temperature	+15 °C to +30 °C		
Consumption	150 - 250 g/m ²		
Way of application	one-sided		
Diluent	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 24 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
- thermosets (FRP, SMC)
- ceramics, stone, concrete
- derived timber products
- rubber
- polyester laminate

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.

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 life.

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

Physical properties of cured adhesive*

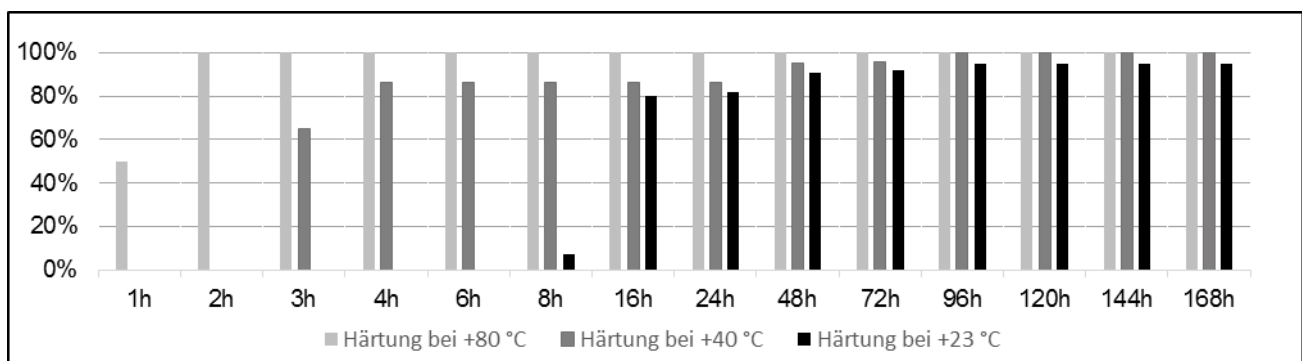
Shore hardness D	85
Shear strength	42 N/mm ²
Elongation of rupture	3 %
Temperature range (depending on substrate and mechanical load)	approx. -40 °C to +150 °C

*Curing 16 h at +70 °C

Curing

1 N/mm² shear strength will be reached at +23 °C after 8 hours! The curing time can be reduced in a heating furnace for example.

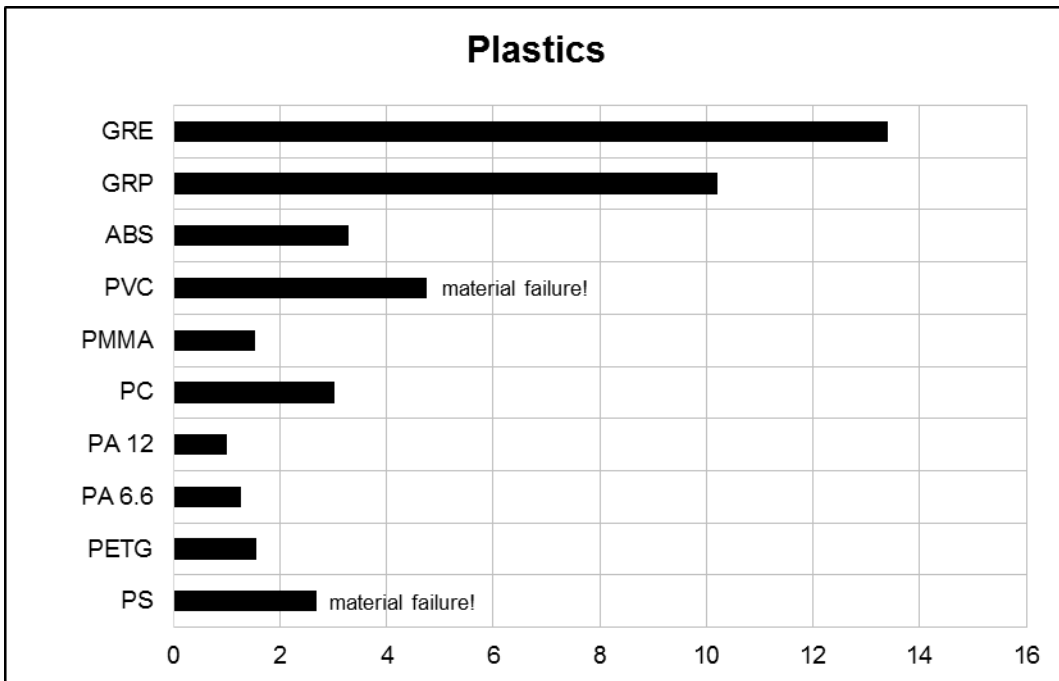
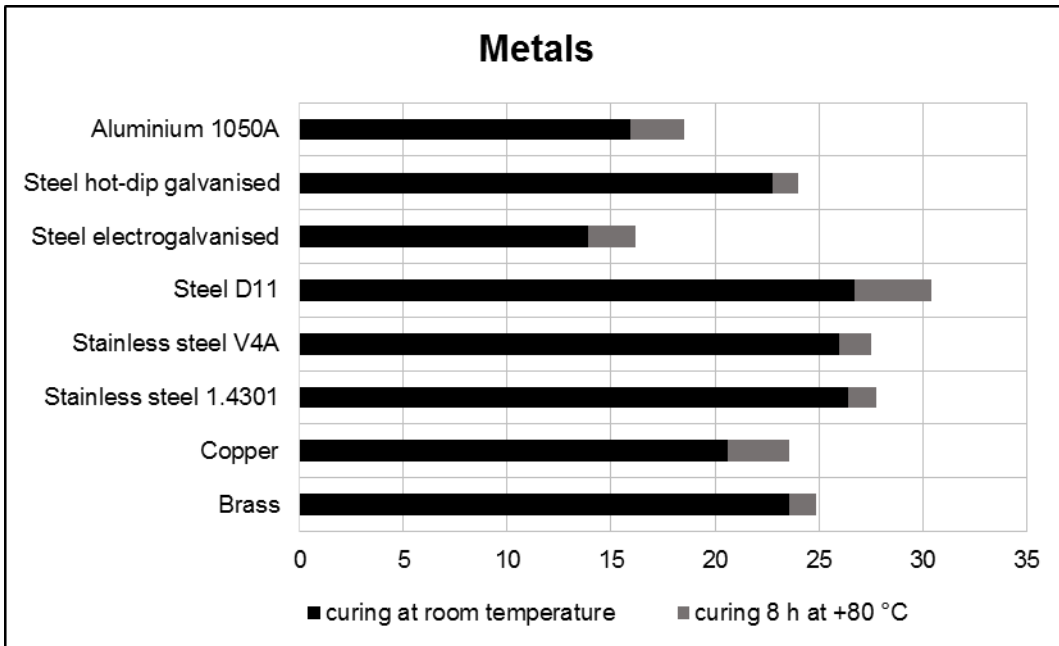
Curing [%] in subject to time [h] and temperature





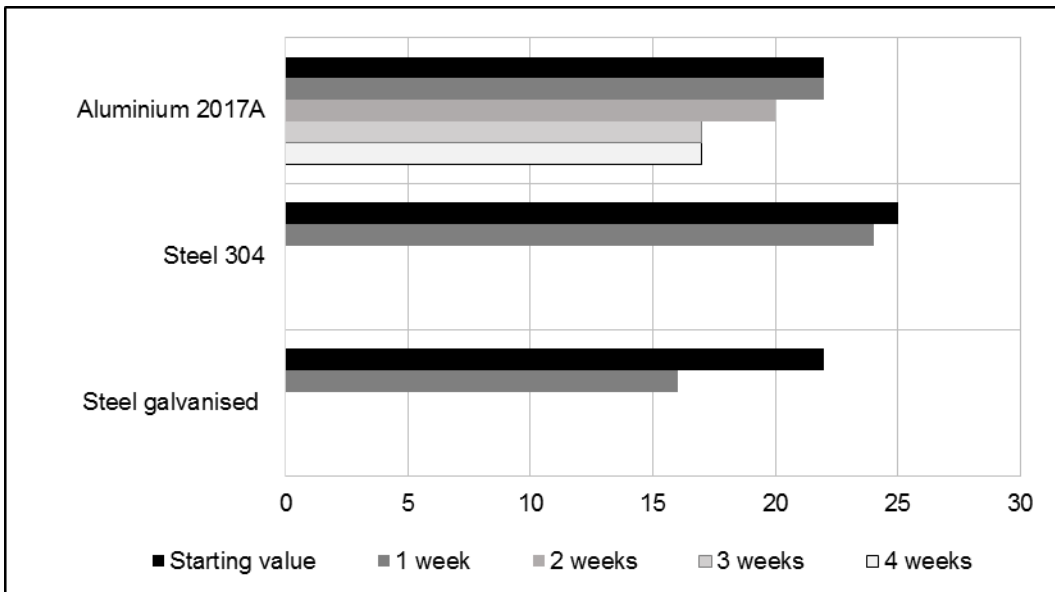
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Lap shear strengths [N/mm²] according to DIN 1465 (average value)



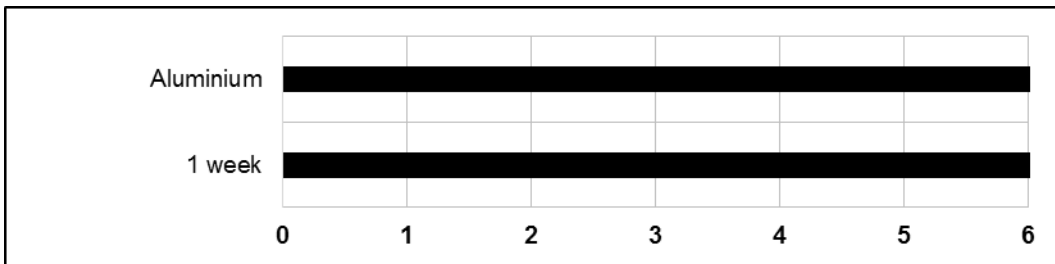
Pre-treatment: test specimens cleaned, metals sand blasted. Plastics and galvanised metals lightly roughened. Tested at room temperature.

Lap shear strengths [N/mm²] Cataplasma test (average value)



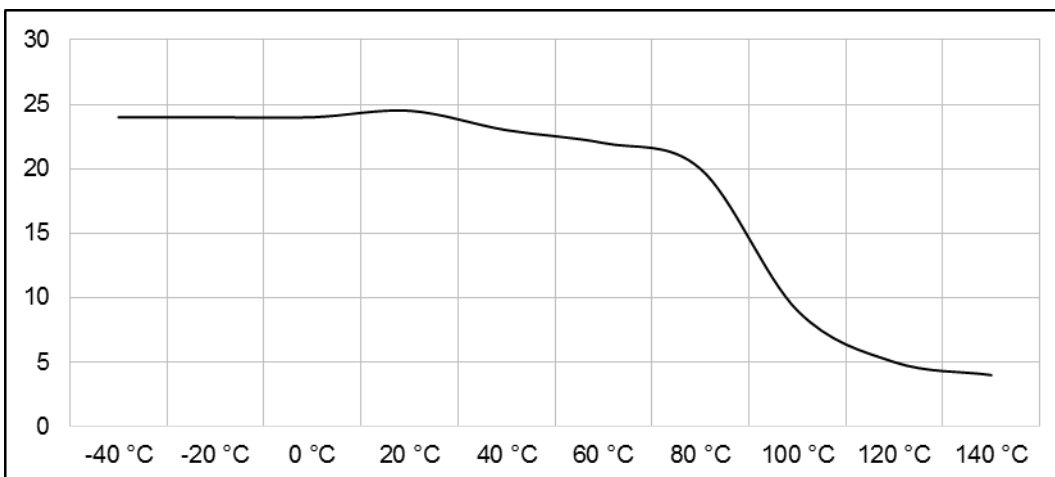
Pre-treatment: test specimens cleaned and sand blasted. Curing 16 h at +70 °C, Tested at room temperature.

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



Pre-treatment: test specimens cleaned and sand blasted. Curing 16 h at +70 °C, Tested at room temperature
Cataplasma test at +70 °C and 100 % RH.

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



Technical status: 14.05.2020

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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.