

TECHNICAL DATASHEET

1307

(Resin 1305 + Hardener 1306)

Description

This low odour grade was developed to bond metals like aluminium, steel, brass and its alloys as well as ferrite, a wide range of plastics and combinations of those materials.

It is a two-component system and cures after mixing into a dry, high-strength and impact resisting polymer film. The best mixture-ratio is 1:1 (volume) and is obtainable without problems by using the common double-cartridges.

Advantages

- Fast curing system
- High tensile shear strength
- Resists against impacts as well as again peeling
- Good gap-filling behaviour up to 0,10mm
- Free of solvents, 100% reactive substance
- Short fixture times
- Passes test acc. to UL-94 HB at layer thickness of 3 mm

Physical properties (liquid product)

Chemical base			Modified methacrylate
Curing System			2-component-system
Mixing ratio by volume and mass			1 : 1 (Resin 1305 : Hardener 1306)
Shelf life in 50ml cartridges			12 months at $\leq 25^{\circ}\text{C}$
Shelf life in 2.5kg bottles/hobbocks			6 months at $\leq 25^{\circ}\text{C}$
Colour	Resin	1305	White
	Hardener	1306	Dark grey-green
	Mixture		Green-brown
Viscosity at 25°C (cone 25, 35s ⁻¹)			4'000 – 6'000 mPa·s
Density	Resin	1305	~ 1.07 g/cm ³
	Hardener	1306	~ 1.07 g/cm ³
	Mixture	1307	~ 1.07 g/cm ³

Curing properties

Pot life at 23°C; ~2g

Fixture time at 23°C (>1 N/mm²)

Function time at 23°C (>10 N/mm²)

Final strength at 23°C

2 – 5 minutes

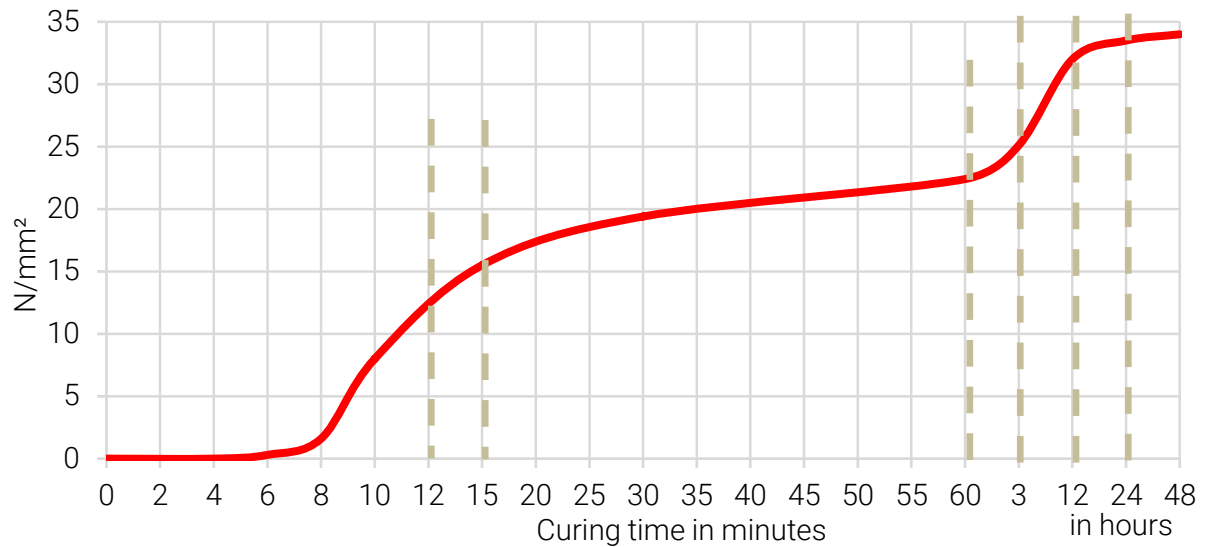
6 – 8 minutes

~ 11 minutes

~ 12 hours

Strength-build up on steel (corundum-blasted and degreased)

Tensile shear strength at 23°C (EN 1465)



Physical properties (cured product)

Thermal range

- 40 °C up to 130 °C

Tensile strength

~ 21 N/mm²

after 24 hours at 23°C

Elongation at break

~ 20 %

after 24 hours at 23°C

Shore D hardness

~ 70

Tensile shear strength acc. to DIN EN 1465

Curing and test temperature: 23 °C; metals corundum blasted / plastics cleaned

Steel

> 22 N/mm²

Aluminium

> 20 N/mm²

Brass

> 17 N/mm²

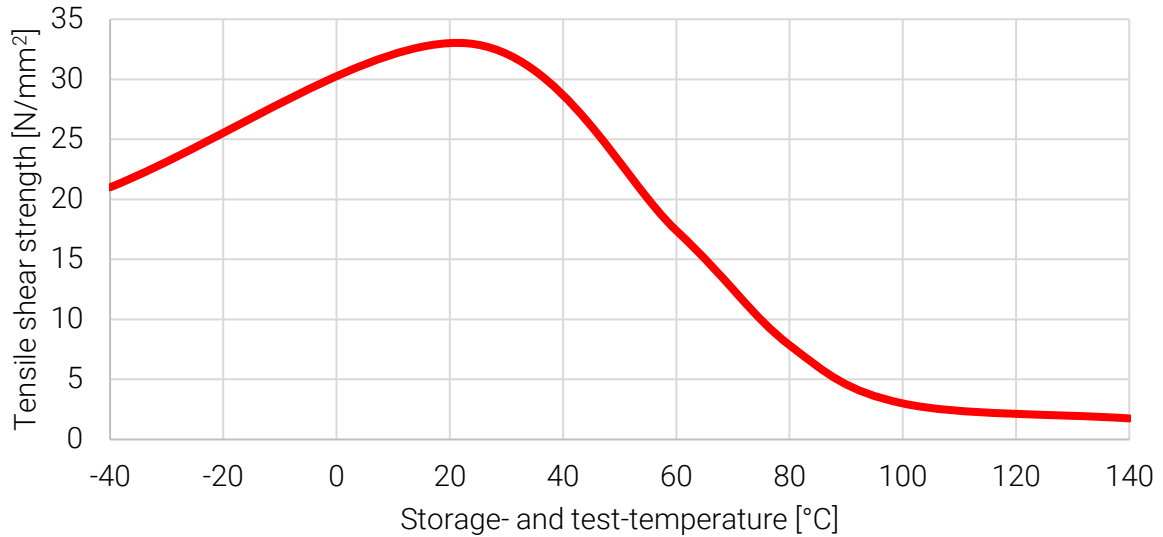
ABS

> 5 N/mm² (Material failure)

PS

> 2.5 N/mm² (Material failure)

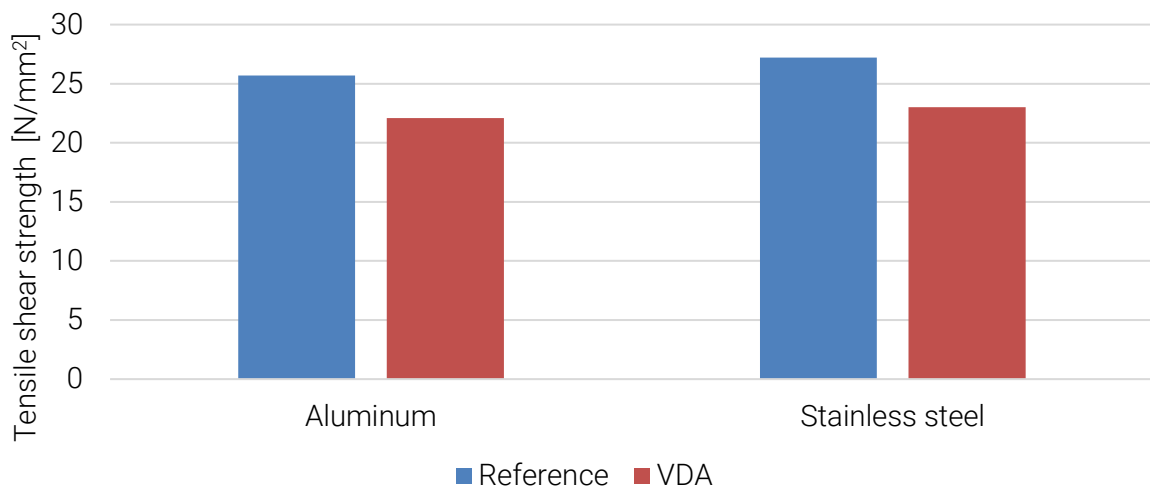
Tensile shear strength on steel (corundum-blasted and degreased) acc. to EN 1465
After 24 hours curing at 23 °C and 1 hour at mentioned test temperature



Solvent resistance

good

Tensile shear strength after 6 VDA cycles



Electrical properties (cured)

Breakdown voltage

27.3 kV/mm

Volume resistivity

$2 \cdot 10^{13}$ Ohm·cm

Precautions

For your own safety, please refer to the information of the concerned MSDS and for the correct handling the “user instructions”.

The information in this data sheet is based on the results of our research and experience. However, the suggestions herein concerning the use, application, and processing of the products (collectively, „the methods“) **are non-binding recommendations only**. It is the user's sole responsibility to determine the suitability and safety of these methods, based on the user's particular purpose in using the products. Before relying on the reliability and safety of any parts that are bonded using the products, it is extremely important that the user test the reliability and safety of the parts that are bonded. Failure to do so could result in serious personal injury. Because of the use of the products are within the purchaser's sole control, Kisling Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose, arising from the sale or use of the products described herein. Kisling Corporation specifically disclaims any liability for consequential, incidental, or other damages of any kind, including lost profits. Kisling Corporation's liability for damages shall not exceed the purchase price of the products used.

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