

TECHNICAL DATASHEET

1315

(Resin 1313 + Hardener 1314)

Description

This low odour grade was developed to bond metals like aluminum, 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

- Very fast curing system, short fixture times
- High tensile shear strength
- Resists against impacts as well as again peeling
- Good gap-filling behaviour up to 0.1 mm
- Passes test acc. to UL-94 HB at layer thickness of 3 mm
- Free of solvents, 100% reactive substance

Physical properties (liquid product)

Chemical base	Modified methacrylate
Curing System	2-component-system
Mixing ratio by volume and mass	1 : 1 (Resin 1313 : Hardener 1314)
Shelf life in 50ml cartridges	9 months at $\leq 25^{\circ}\text{C}$
Shelf life in 2.5kg bottles/hobbocks	3 months at $\leq 25^{\circ}\text{C}$
Colour	Off-white translucent (blue fluorescent)
Resin 1313	Dark blue-green
Hardener 1314	Green-brown
Mixture	
Viscosity at 25°C (cone 25, 35s^{-1})	5'500 – 7'500 mPa•s
Density	$\sim 1.03 - 1.10 \text{ g/cm}^3$

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

1 – 2 minutes

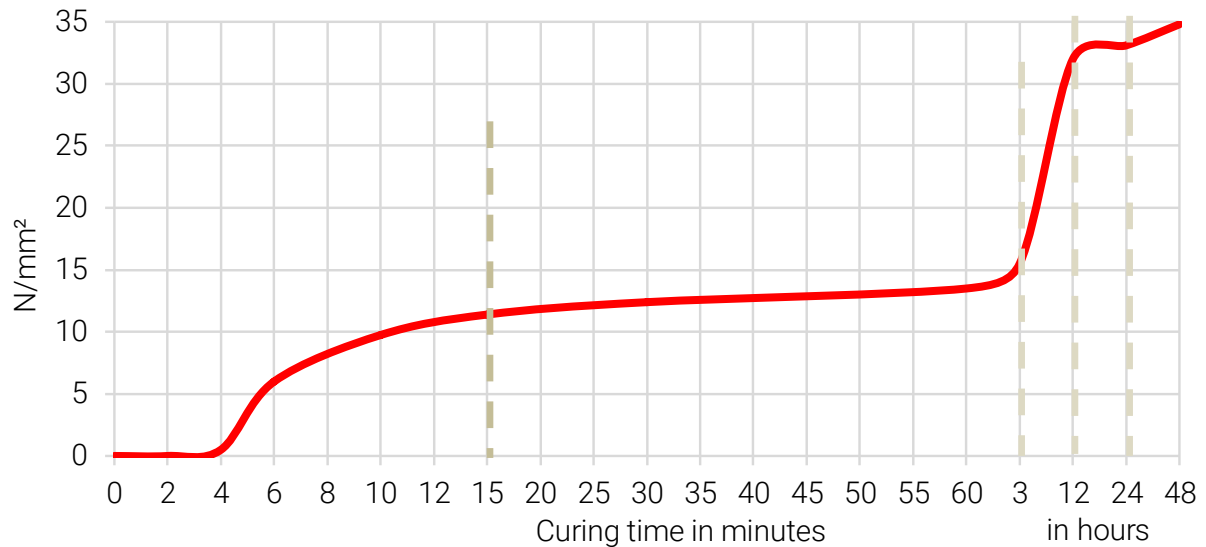
3 – 4 minutes

~ 11 minutes

~ 12 hours

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

Tensile shear strength at 23°C (EN 1465)



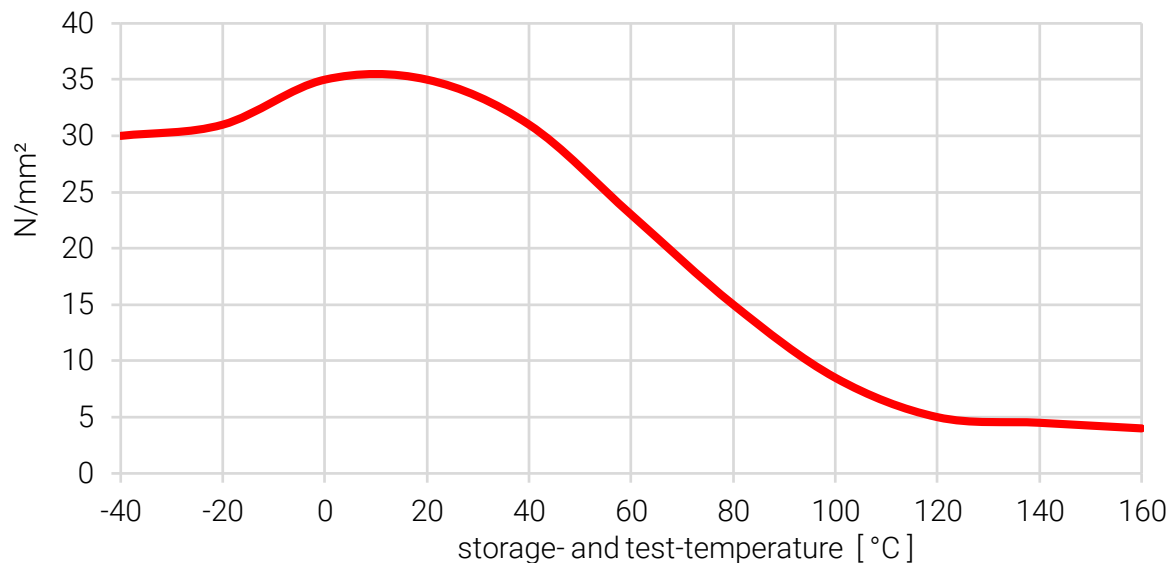
Physical properties (cured product)

Thermal range

- 40 °C up to 150 °C

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



Tensile strength after 24 hours at 23°C	~ 21 N/mm ²
Elongation at break after 24 hours at 23°C	~ 20 %
Shore D hardness	~ 72
Tensile shear strength acc. to DIN EN 1465 Curing and test temperature: 23 °C; metals corundum blasted / plastics cleaned	
Steel	> 22 N/mm ²
Aluminium	> 20 N/mm ²
Brass	> 17 N/mm ²
ABS	> 5 N/mm ² (Material failure)
PS	> 2.5 N/mm ² (Material failure)

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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