

TECHNICAL DATASHEET

7415

(Resin 7413 + Hardener 7414)

Description

7415 is a high strength and fast curing product with good adhesion to metals, ceramic, glass, rubber, hard plastics and a wide range of other common materials.

Advantages

- Fast curing
- Excellent adhesion on various substrates (surfaces)
- Pasty, thixotropic
- Solvent-free, good chemical resistance

Physical properties (liquid product)

Chemical base Epoxy resin adhesive Curing System 2-component-system Mixing ratio (volume) 1:1 (resin: hardener) Mixing ratio (weight) 100 : 82.6 (resin : hardener)

Shelf life 24 month at 2 - 30 °C

Viscosity acc. to DIN EN 12092 at 25°C, cone MK25, D=35s-1

7413 25'000 - 40'000 mPa·s Resin Hardener 7414 22'000 - 33'000 mPa·s

Density Resin 7413 $\sim 1.45 \, \text{g/cm}^3$ 7414 $\sim 1.20 \text{ g/cm}^3$ Hardener

Mixture $\sim 1.33 \text{ g/cm}^3$

Colour Resin 7413 White Hardener 7414 Black

Mixture Grey

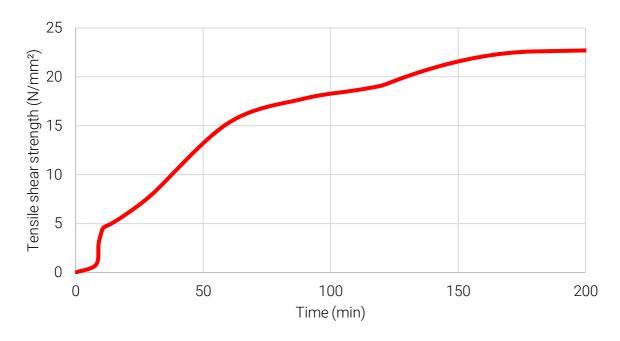
Curing properties

Pot life at 23°C; ~5a $3 - 5 \, \text{minutes}$ Fixture time at 23°C (> 1 N/mm²) 8 - 10 minutes Functional strength at 23°C (> 10 N/mm²) 40 - 50 minutesFinal strength at 23°C ~ 48 hours





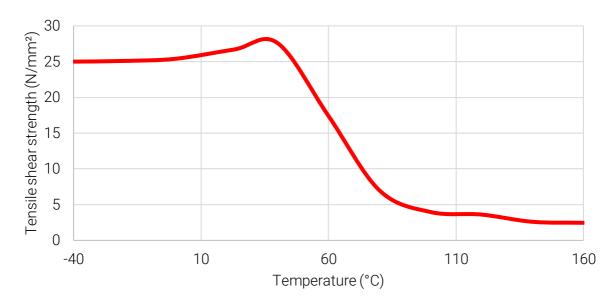
Strength build-up at 23 $^{\circ}$ C on steel-stripes / corundum blasted / degreased Tensile shear strength acc. to DIN EN 1465



Physical properties (cured product)

Thermal range Glass transition point Curing: 16 hours at 40 °C - 60 °C up to 145 °C ~ 25 °C

Strength at various temperatures on steel-stripes / corundum blasted / degreased Curing: 16 hours at +40°C and 2 hours stored at test-temperature Tensile shear strength acc. to DIN EN 1465





 $\begin{array}{ll} \mbox{Modulus (DIN EN ISO 178)} & \sim 2400 \ \mbox{N/mm}^2 \\ \mbox{Tensile strength (ISO 527 1A/10)} & \sim 43 \ \mbox{N/mm}^2 \end{array}$

Elongation at break (ISO 527 1A/10) ~ 4 %

Shore D hardness ~ 75

Curing: 16 hours at 40 °C

Tensile shear strength acc. to DIN EN 1465

Curing: 16 hours at 40 °C, 24 hours at 23 °C; test temperature: 23 °C; metals corundum blasted / plastics cleaned

Steel> 24 N/mm²Stainless steel> 22 N/mm²Aluminium> 22 N/mm²Brass> 22 N/mm²Copper> 18 N/mm²

 GRP, epoxy
 >18 N/mm²

 ABS
 > 3 N/mm²

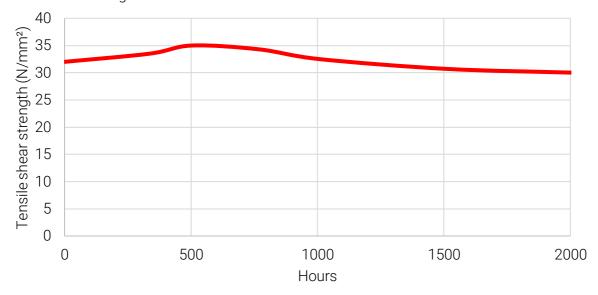
 Polyamide 66
 > 1 N/mm²

 PC
 > 2 N/mm²

 PVC
 > 3 N/mm²

Long-term heat aging at 145 $^{\circ}\text{C}$ on steel-stripes / corundum blasted / degreased Measured at room-temperature

Tensile shear strength acc. to DIN EN 1465





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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