BONDING +
SEALING +
ENCAPSULATION

Kisling

TECHNICAL DATASHEET

ergo.® 7410

(ergo.® 7408 resin + ergo.® 7409 hardener)

Description

ergo.® 7410 is a transparent, fast curing epoxy resin. The adhesive is most appropriate for bonding of metals, ceramic, glass, rubber and hard plastics. It is often used as an repair adhesive, for cable potting, for jewellery manufacture or as an structural adhesive in mechanical engineering.

Advantages

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

Physical properties (liquid product)

Chemical base			epoxy resin
Curing System			2-component-system
Mixing ratio (v:v)			1 : 1 (*resin : hardener*)
Mixing ratio (w:w)			100 : 94,9 (*resin : hardener*)
Shelf life			36 month at 2 – 30 °C
Viscosity (mixture) acc. to DIN EN 12092			8'000 – 11'000 mPa•s
Density	Mixture		1.1 g/cm³
Colour	Resin	ergo.® 7408	clear
	Hardener	ergo.® 7409	yellowish
	Mixture		clear

Curing properties

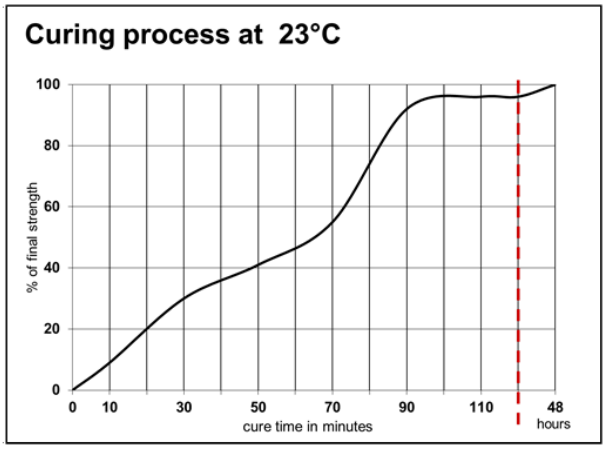
Pot life at 23°C; ~5g	~ 3.5 minutes
Fixture time at 23°C (> 1 N/mm²)	~ 7 minutes
Final strength at 23°C	~ 48 hours
Functional strength (> 10 N/mm²)	
at 23°C	~ 60 Minutes
at 40°C	~ 35 Minutes
at 60°C	~ 10 Minutes
at 100°C	~ 2 Minutes

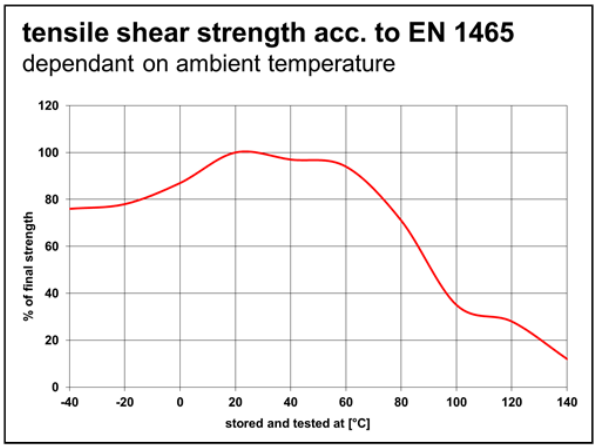
Physical properties (cured product)

Thermal range	- 60 °C up to 100 °C
Glass transition point	52°C
Modulus (DIN EN ISO 178) after 7 days at 23°C	1450 MPa
Tensile strength (ISO 527 1A) after 7 days at 23°C	~ 46 N/mm²
Elongation at break (ISO 527 1A) after 7 days at 23°C	~ 6 %
Shore D hardness	~ 75

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	> 20 N/mm²
Stainless steel	> 17 N/mm²
Aluminium	> 13 N/mm²
Brass	> 15 N/mm²
Copper	> 15 N/mm²
GRP, epoxy	~ 14 N/mm²
ABS	~ 4 N/mm²
Polyamide 6	~ 4 N/mm²
PC	~ 4 N/mm²
PMMA	~ 3 N/mm²
PVC	~ 4 N/mm²





Thermal conductivity	0.18 W/m·K
Volume resistivity	$8 \cdot 10^{13}$ Ω·cm
Dielectric strength	~ 38.2 kV/mm

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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