

### TECHNICAL DATASHEET

# ergo.® 7350

(ergo.<sup>®</sup> 7348 resin + ergo.<sup>®</sup> 7349 hardener)

### **Product - Description**

The special property of this white, flowing two-component epoxy resin is its very slow curing behavior at room temperature, which makes it suitable for potting of big volumes and for coating of big areas. The cured product shows a hard and glossy white finish.

## Advantages

- low odor
- slow-curing behavior
- cures to a dry and glossy film
- good flowing property, self-levelling
- may be used either as coating or as a potting compound
- free of solvents, 100% reactive material

## Physical Properties - Liquid product

Chemical base: Epoxy resin

Viscosity in accordance to DIN 54453

(Cone-plate-system, cone C-50, shear rate of 100 s-1, 25 °C)

Resin (ergo.® 7348): 20.000 - 25.000 mPas Hardener (ergo.® 7349): 80 - 120 mPas Mixture (ergo.® 7350): 4.000 - 5000 mPas

Density Resin (ergo.® 7348): 1,30 g/cm<sup>3</sup>

Hardener (ergo.<sup>®</sup> 7349): 1,05 g/cm<sup>3</sup>

Colour Resin (ergo.® 7348): white

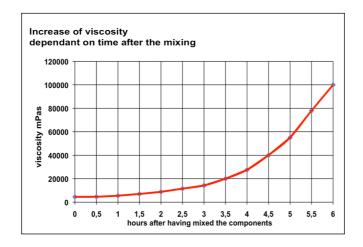
Hardener (ergo.® 7349): light yellow to pale brown

Mixture (ergo.® 7350): white

Shelf life 24 month at RT

#### Curing

Curing system 2-component-product (ratio 5:1 (w:w))
Potlife of a 100 g mixture: ~ 2 hours at 23°C



Final strength

7 days, 23°C / 16 hours, 40°C / 1 hour, 80°C



# Physical Properties - Cured product

(After 7 days at room temperature)

Tensile shear strength, according to EN 1465:

 $\begin{array}{lll} \mbox{Aluminium} & \geq 10 \ \mbox{N/mm2} \\ \mbox{Steel} & \geq 13 \ \mbox{N/mm}^2 \\ \mbox{Polycarbonate} & 2 \ \mbox{N/mm}^2 \end{array}$ 

 ABS
 4 N/mm²

 PVC, hard
 1,5 N/mm²

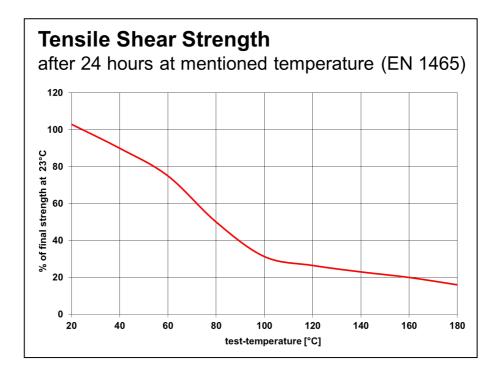
 PA 6.6
 1,5 N/mm²

Shore D – hardness 80 – 85

Thermal range - 40° C to + 180° C

# Tensile shear strength on steel, depending on temperature

(Curing 7 days at 23°C / Storage: 24 hours at test-temperature)



#### Long-term properties at increased temperature

(Curing 7 days at 23°C / Storage: below mentioned time at +150°C)

Testing: after cooling down to room temperature (23°C):

.g a.c to topo.ata (20 °c).	
100 hours @ +150°C	250 hours @ 150°C
142%*	142%*

\*compare to the reference at 23°C



**Electrical properties** 

Breakdown voltage Creep resistance CTI 28.7 [KV/mm] > 600 [V]

#### Others

The cured material fulfils the test-requirements according to ISO 10933-5 (Cytotoxicity) and acc. to ISO 10933-10 (skin irritation test)

#### Instruction of use

In order to receive a homogenous and reactive mixture, mix 5 parts by weight of resin ergo.<sup>®</sup> 7348 and 1 part by weight of hardener ergo.<sup>®</sup> 7349 very thoroughly. The shorter the time between mixing and using, the lower will be the viscosity Details are shown in the curve of reaction on page 2.

Apply the mixture on one surface and distribute it as a uniform film-layer. A notched trowel is a helpful and supporting tool. Join the parts and protect them with fixing elements (clamps for instance) against movement until the product is really cured. Heating will shorten the curing-time. If the product shall be used as potting compound, use it immediately, but at least within the first hour after mixing.

ergo.® 7348 has the ability to crystallize at temperatures below 20 °C. This is a product specific property and completely reversible. A possible crystallization of this adhesive does not indicate any quality issues.

To avoid the possible crystallization we recommend to store ergo.® 7430 not below 20 °C over a long period of time.

To secure proper workability and reverse a potential crystallization, before usage this product should be tempered for 24 hours at 40 °C.

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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