

## Product Data Sheet

### ISO-PUR K 710

#### Description:

ISO-PUR K 710 is a mineral filled cold-curing 2-component polyurethane cast resin based on poly-ether- and -esterpolyols and precured aromatic diisocyanates. The cured product is tough but elastic and shows good electro insulating properties. ISO-PUR K 710 is used as casting resin in 1 kV cable joints and is an inexpensive alternative to ISO-PUR K 760 in its standard mixing ratio.

Cured samples of ISO-PUR K 710 do not become brittle. The system has a good thermal conductivity and minimum shrinkage while curing. ISO-PUR K 710 protects against corrosion and shows good adhesion to metal, ceramics and many plastics.

#### Technical Data:

resin	viscosity / 20°C	app. 5000 mPa s
	colour	pale brown*
	density / 20°C	1.5 g/cm <sup>3</sup>
hardener	viscosity / 20°C	app. 120 mPa s
	colour	brown
	density / 20°C	1.2 g/cm <sup>3</sup>
mixture	mixing ratio resin : hardener	5 : 1 pbw*
	viscosity / 20°C	app. 2600 mPa s
	colour	pale brown*
	density / 20°C	1.5 g/cm <sup>3</sup>
	potlife / 20°C	Standard: App.15 min *
	geltime / 20°C	Standard: App.20 min *
	max. temperature (200g, start at 20°C)	app. 50°C *

\* or on request

## Continuation Technical Data ISO-PUR K 710

### Properties of cured product (typical values):

mixing ratio resin : hardener	5 : 1 pbw
hardness	50 Shore D
temperature resistance	long-time: 140°C short-time: 180°C
tensile strength	20 N/mm <sup>2</sup>
elongation at break	80 %
dielectric strength	20 kV/mm
dielectric strength while still liquid	7 kV/mm
dissipation factor tan $\delta$ / 25°C / 50Hz	0.02
dielectric constant $\epsilon$ / 25°C / 50Hz	4.2
thermal conductivity	0.6 W/K m
thermal volume expansion coefficient	$70 * 10^{-6} K^{-1}$
tracing resistance	KA 3c
water absorption after 30 days / 23°C	0.2 %
chemical resistance against mineral oil, 2n H <sub>2</sub> SO <sub>4</sub> , CaCO <sub>3</sub> -solution	no visible degradation

#### Storage:

Store dry and well closed.

#### Processing:

Stir up resin component well. Then mix resin and hardener carefully in recommended ratio for 1 - 3 minutes (depending on size of mixture and potlife). The mixture has to be poured into the mould immediately after mixing. Air bubbles that have been stirred in the mixture can be removed before end of potlife by evacuating or by blowing hot air over the surface causing the bubbles to collapse.

Please see material safety data sheet for additional information.