

Product Data Sheet ISO-PUR K 710

Description:

ISO-PUR K 710 is a minerally filled cold-curing 2-component polyurethane cast resin based on polyetherand -esterpolyols and precured aromatic diisocyanates. The cured product is tough but elastic and shows good electroinsulating properties. ISO-PUR K 710 is used as casting resin in 1 kV cable joints and is a cheap 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 colour density / 20°C	app. 8500 mPa s pale brown* 1.5 g/cm ³
hardener	viscosity / 20°C colour density / 20°C	app. 250 mPa s brown 1.2 g/cm ³
mixture	mixing ratio resin : hardener viscosity / 20°C colour density / 20°C potlife / 20°C gelttime / 20°C max. temperature (200g, start at 20°C)	5 : 1 pbw* app. 5500 mPa s pale brown* 1.5 g/cm ³ app. 14 min * app. 24 min * 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	94 Shore A / 50 Shore D
temperature resistance	long-time: 140°C short-time: 180°C
tensile strength	20 N/mm ²
elongation at break	80 %
dielectric strength	20 kV/mm
dielectric strength while still liquid	7 kV/mm
dissipation factor tan δ / 25°C / 50Hz	0.02
dielectric constant ϵ / 25°C / 50Hz	4.2
thermal conductivity	0.6 W/K m
thermal volume expansion coefficient	$70 \cdot 10^{-6} \text{ K}^{-1}$
tracing resistance	KA 3c
water absorption after 30 days / 23°C	0.2 %
chemical resistance against mineral oil, 2n H ₂ SO ₄ , CaCO ₃ -solution	no visible degradation

Storage:

Store dry and well closed.

Processing:

Stir up resin compound 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 can be removed before end of potlife by evacuating or by using hot air.

Please see material safety data sheet for additional information.