

Product Data Sheet

ISO-PUR K 715

Description:

ISO-PUR K 715 is a mineral filled cold-curing 2-component polyurethane cast resin based on polyether- and -esterpolyols and precured aromatic diisocyanates. The cured product is soft and flexible with low continuous tear strength. Initial tear strength is high enough to protect embedded components against mechanical stress and impact. If necessary, ISO-PUR K 715 can be removed and embedded components can be replaced by notching the cured resin with a knife and tearing it off without heating.

Cured samples of ISO-PUR K 715 do not become brittle. The system has a good thermal conductivity and minimum shrinkage while curing. ISO-PUR K 715 protects against corrosion and shows good adhesion to metal, ceramics and many plastics. The hydrolytic resistance is excellent.

Technical Data:

resin	viscosity / 20°C	app. 10000 mPa s
	colour	pale brown*
	density / 20°C	1.5 g/cm ³
hardener	viscosity / 20°C	app. 120 mPa s
	colour	brown
	density / 20°C	1.2 g/cm ³
mixture	mixing ratio resin : hardener	11 : 1 pbw
	viscosity / 20°C	app. 7000 mPa s
	colour	pale brown*
	density / 20°C	1.5 g/cm ³
	potlife / 20°C	Standard: App. 30 min *
	geltime / 20°C	Standard: App. 60 min *
	max. temperature (200g, start at 20°C)	app. 35°C *

* or on request

Continuation Technical Data ISO-PUR K 715

Properties of cured product (typical values):

mixing ratio resin : hardener	11 : 1 pbw
hardness	78 Shore A / 20 - 25 Shore D
temperature resistance	long-time: 120°C short-time: 180°C
tensile strength	15 N/mm ²
elongation at break	80 %
dielectric strength	> 15 kV/mm
dielectric strength while still liquid	> 8 kV/mm
dissipation factor tan δ / 25°C / 50Hz	0.02
dielectric constant ϵ / 25°C / 50Hz	4.2
thermal conductivity	0.8 W/K m
thermal volume expansion coefficient	$100 * 10^{-6} K^{-1}$
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 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.