

Product Data Sheet

ISO-PUR K 711

Description:

ISO-PUR K 711 is a mineral filled cold-curing 2-component polyurethane cast resin based on polyether- and -esterpolyols and precured aromatic diisocyanates.

Cured samples of ISO-PUR K 711 do not become brittle. The system has a good thermal conductivity and a minimum shrinkage while curing. ISO-PUR K 711 protects against corrosion and shows good adhesion to metal, ceramics and many plastics. The standard mixing ratio resin to hardener is 6 : 1 by weight but different hardness can be achieved by varying the mixing ratio.

Technical Data:

resin	viscosity / 20°C colour density / 20°C	app. 9000 mPa s pale brown* 2.1 g/cm ³	
hardener	viscosity / 20°C colour density / 20°C	app. 120 mPa s brown 1.2 g/cm ³	
mixture	mixing ratio resin : hardener viscosity / 20°C colour density / 20°C potlife / 20°C geltime / 20°C max. temperature (200g, start at 20°C)	5 : 1 pbw app. 1800 mPa s pale brown* 1.9 g/cm ³ Standard: App. 30 min * Standard: App. 45 min * app. 55 - 60°C *	6 : 1 pbw (standard mixing ratio) app. 2000 mPa s pale brown* 1.9 g/cm ³ Standard: App. 30 min * Standard: App. 45 min * app. 50 - 55°C *

* or on request

Continuation Technical Data ISO-PUR K 711

Properties of cured product (typical values):

mixing ratio resin : hardener	5 : 1 pbw	6 : 1 pbw
hardness	app. 85 Shore D	app. 82 Shore D
temperature resistance	long-time: 145°C short-time: 200°C	long-time: 145°C short-time: 200°C
tensile strength	4.5 N/mm ²	4 N/mm ²
elongation at break	10 %	12 %
dielectric strength	> 22 kV/mm	> 24 kV/mm
dielectric strength while still liquid	> 8 kV/mm	> 8 kV/mm
dissipation factor tan δ / 25°C / 50Hz	0.01	0.01
dielectric constant ϵ / 25°C/ 50Hz		
thermal conductivity (0,2 mm)	1.6 W/K m	1.7 W/K m
thermal volume expansion coefficient		
tracing resistance	KA 3c	KA 3c
water absorption after 30 days / 23°C		
chemical resistance against mineral oil, 2n H ₂ SO ₄ , CaCO ₃ -solution	no visible degradation	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 can be removed before end of potlife by evacuating or by using hot air.

Please see material safety data sheet for additional information.