

Product Data Sheet

ISO-PUR K 750

Description:

ISO-PUR K 750 is an unfilled cold-curing 2-component polyurethane cast resin based on polyetherand-esterpolyols and precured aromatic diisocyanates. The cast resin was tested according to the German norm VDE 0291 / part 2 including hydrolysis and hydrophobic resistance. ISO-PUR K 750 can be used up to a power of 10 kV (e. g. in cable-joints, transformers).

ISO-PUR K 750 shows low viscosity while pouring. The cured product has a good adhesion to metals and many plastics. The hydrophobic resistance is excellent. By varying the mixing ratio resin to hardener different hardnesses can be achieved.

Technical Data:

resin	viscosity / 20°C colour density / 20°C	app. 1200 mPa s white-opaque* 1.1 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)	2.2 : 1 pbw app. 900 mPa s brown- opaque* 1.1 g/cm ³ app. 10 min * app. 15 min * app. 80°C *	3 : 1 pbw app. 1000 mPa s brown-opaque * 1.1 g/cm ³ app. 20 min * app. 25 min * app. 60°C *	3.5 : 1 pbw app. 1100 mPa s brown-opaque * 1.1 g/cm ³ app. 25 min * app. 35 min * app. 50°C *

*
or on request

Continuation Technical Data ISO-PUR K 750

Properties of cured product (typical values):

mixing ratio resin : hardener	2.2 : 1 pbw	3 : 1 pbw	3.5 : 1 pbw
hardness	98 Shore A / 65 Shore D	70-75 Shore A / 20-25 Shore D	55-60 Shore A / 10-15 Shore D
temperature resistance	long-time: 130°C short-time: 200°C	long-time: 120°C short-time: 180°C	long-time: 120°C short-time: 160°C
tensile strength	25 N/mm ²	20 N/mm ²	5 N/mm ²
elongation at break	50 %	70 %	100 %
dielectric strength	> 30 kV/mm	> 30 kV/mm	> 30 kV/mm
dielectric strength while still liquid	> 8 kV/mm	> 8 kV/mm	> 8 kV/mm
dissipation factor tan δ / 25°C / 50Hz	0.007	0.01	0.008
dielectric constant ϵ / 25°C / 50Hz	3.4	3.5	3.4
thermal conductivity	0.3 W/K m	0.35 W/K m	0.4 W/K m
thermal volume expansion coefficient	95 * 10 ⁻⁶ K ⁻¹	230 * 10 ⁻⁶ K ⁻¹	250 * 10 ⁻⁶ K ⁻¹
tracing resistance	KA 3 c	KA 3c	KA 3c
water absorption after 30 days / 23°C	0.5 %	0.5 %	0.6 %
chemical resistance against mineral oil, 2n H ₂ SO ₄ , CaCO ₃ -solution	no visible degradation	no visible degradation	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.