

Product Data Sheet

ISO-PUR K 750

Description:

ISO-PUR K 750 is an unfilled cold-curing 2-component polyurethane cast resin based on polyether- and -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. Different hardness can be achieved by varying the mixing ratio resin to hardener.

Technical Data:

resin	viscosity / 20°C	app. 1200 mPa s		
	colour	beige-opaque*		
	density / 20°C	1.1 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	2.2 : 1 pbw	3 : 1 pbw	3.5 : 1 pbw
	viscosity / 20°C	app. 900 mPa s	app. 1000 mPa s	app. 1100 mPa s
	colour	brown-opaque*	brown-opaque *	brown-opaque *
	density / 20°C	1.1 g/cm ³	1.1 g/cm ³	1.1 g/cm ³
	potlife / 20°C	Standard: Ca. 10 min*	Standard: Ca. 20 min*	Standard: Ca. 30 min*
	gelttime / 20°C	Standard: Ca. 13 min*	Standard: Ca. 25 min*	Standard: Ca. 45 min*
	max. temperature (200g, start at 20°C)	app. 75°C *	app. 50°C *	app. 40°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	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	$95 \cdot 10^{-6} \text{ K}^{-1}$	$230 \cdot 10^{-6} \text{ K}^{-1}$	$250 \cdot 10^{-6} \text{ K}^{-1}$
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 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.