

Product Data Sheet

ISO-PUR K 781

Description:

ISO-PUR K 781 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 781 are tough but not brittle. The product was especially developed for applications where high hardness and temperature resistance are necessary. The hydrolytic resistance is excellent.

Technical Data:

resin	viscosity / 20°C	app. 4000 mPa s
	colour	pale brown*
	density / 20°C	1.4 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 : 1 pbw
	viscosity / 20°C	app. 1500 mPa s
	colour	pale brown*
	density / 20°C	1.3 g/cm ³
	potlife / 20°C	Standard: App. 10 min *
	gelttime / 20°C	Standard: App. 11 min *
	max. temperature (200g, start at 20°C)	app. 90°C *

* or on request

Continuation Technical Data ISO-PUR K 781

Properties of cured product (typical values):

mixing ratio resin : hardener	2 : 1 pbw
hardness	85 Shore D
temperature resistance	long-time: 140°C short-time: 200°C
tensile strength	75 N/mm ²
elongation at break	5 %
dielectric strength	> 22 kV/mm
dielectric strength while still liquid	> 8 kV/mm
dissipation factor $\tan \delta$ / 25°C / 50Hz	0.02
dielectric constant ϵ / 25°C / 50Hz	4.1
thermal conductivity	0.45 W/K m
thermal volume expansion coefficient	$50 \times 10^{-6} \text{ K}^{-1}$
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 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.