

## Product data sheet

### ISO-PUR BD 50/100

#### Description:

ISO-PUR BD 50 und 100 are cold curing 2 component-polyurethane cast resins based on polybutadiene-polyols and precured aromatic diisocyanates.

Because of their hydrophobic properties both materials are very suitable for protection of telecommunication equipment, electronic part and 1 kV cable boxes against moisture. Even at very low temperatures ( $T_g < -50\text{ °C}$ ) both materials exert only very low forces on sensible electronic parts and protect them against the environmental conditions. The hydrolytic stability of both materials is excellent. The cured product can be removed for changing installations or for repairing purposes very easily and shows good adhesion to metals, minerals and many plastics. ISO-PUR BD 100 is the filled variant of ISO-PUR BD 50

#### Technical Data:

		ISO-PUR BD 50	ISO-PUR BD 100
resin	viscosity / 20°C	app. 800 mPa s	app. 3700 mPa s
	colour	yellow -opaque *	beige *
	density / 20°C	0,95 g / cm <sup>3</sup>	1,35 g / cm <sup>3</sup>
hardener	viscosity / 20°C	app. 120 mPa s	app. 120 mPa s
	colour	brown	brown
	density / 20°C	1,2 g / cm <sup>3</sup>	1,2 g / cm <sup>3</sup>
mixture	mixing ratio resin : hardener	6,5 : 1 pbw*	13 : 1 pbw*
	viscosity / 20°C	app. 500 mPa s	app. 3000 mPa s
	colour	yellow -opaque *	beige *
	density / 20°C	0,95 g / cm <sup>3</sup>	1,35 g / cm <sup>3</sup>
	potlife / 20°C	app. 30 min *	app. 30 min *
	gel time / 20°C	app. 60 min *	app. 60 min *

\* or on request

## Continuation technical data ISO-PUR BD 100

### Properties of cured product (typical values):

mixing ratio resin : hardener	6,5 : 1 pbw	13 : 1 pbw
temperature resistance	long term: 120 °C short term: 140 °C	long term: 120 °C short term: 140 °C
Tg	< -50°	< -50°
elongation	app. 150 %	app. 120 %
dielectric strength	> 20 kV/mm	> 20 kV/mm
dielectric strength while still liquid	> 7 kV/mm	> 7 kV/mm
water absorption (30 days at 23°C)	< 0,1 %	< 0,08 %
Thermal conductivity	0,2 W / mK	0,35 W / mK
hardness	app. 30 Shore A	app. 50 Shore A
tracing resistance	CTI > 600	CTI > 600
chemical resistance against mineral oil, 2n H <sub>2</sub> SO <sub>4</sub> , CaCO <sub>3</sub> -solution	no visible degradation	no visible degradation

#### Storage:

Store dry and well closed between 10 - 35°C. Shelf life 12 months under proper storage conditions

#### 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). We recommend a maximum tolerance of +/- 5 w% concerning the mixing ratio. 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.