

Product Data Sheet

ISO-POX 2F 1000

Description:

ISO-POX 2F 1000 is a cold-curing cast resin for sealing electronic parts.

The cured product shows high transparency and has no tendency to form bubbles during the curing process. The surface is tack-free and mar-resistant. The product protects against corrosion and shows good adhesion to metal, ceramics and many plastics.

The standard mixing ratio resin to hardener is 2 : 1 by weight but by varying the mixing ratio different hardnesses can be achieved.

Technical Data:

resin	viscosity / 20°C	app. 1500 mPa s		
	colour	colourless*		
	density / 20°C	1.1 g/cm ³		
hardener	viscosity / 20°C	app. 40 mPa s		
	colour	colourless		
	density / 20°C	1.0 g/cm ³		
mixture	mixing ratio resin : hardener	2 : 1 pbw	3 : 1 pbw	
		app. 400 mPa s	app. 500 mPa s	
	viscosity / 20°C	colourless*	colourless *	
	colour	1.1 g/cm ³	1.1 g/cm ³	
	density / 20°C	app. 30 min	app. 35 min	
	potlife / 20°C	app. 40 min	app. 45 min	
	geltime / 20°C	app. 110°C	app. 100°C	
	max. temperature (200g, start at 20°C)			

* or on request

Continuation Technical Data ISO-POX 2F 1000

Properties of cured product (typical values):

mixing ratio resin : hardener	2 : 1 pbw	3 : 1 pbw
hardness	90-95 Shore A / 45-50 Shore D	80-85 Shore A / 35-40 Shore D
temperature resistance	long-time: 120°C short-time: 180°C	long-time: 120°C short-time: 180°C
tensile strength	10 N/mm ²	8 N/mm ²
elongation at break	50 %	70 %
dielectric strength	20 kV/mm	20 kV/mm
dielectric strength while still liquid	7 kV/mm	7 kV/mm
dissipation factor tan δ / 25°C / 50Hz	0.008	0.008
dielectric constant ϵ / 25°C / 50Hz	4.2	4.1
thermal conductivity	0.3 W/K m	0.3 W/K m
thermal volume expansion coefficient	$60 \cdot 10^{-6} \text{ K}^{-1}$	$65 \cdot 10^{-6} \text{ K}^{-1}$
tracing resistance	KA 3 c	KA 3c
water absorption after 30 days / 23°C	0.3 %	0.3 %
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 compound well. Heat up (50°C) if partly crystallised. 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.