

Product Data Sheet

ISO- ISO-POX HC 30000

Description:

ISO-POX HC 30000 is a warm-curing, minerally filled, solvent free cast resin for sealing electronic parts. The cured product shows good long term temperature stability, good mechanical and flame retardent properties. The surface is tack-free and mar-resistant. The product protects against corrosion and shows good adhesion to metal, ceramics and many plastics.

Technical Data:

resin	viscosity / 20°C	app. 100000 mPa s		
	colour	red brown		
	density / 20°C	1.8 g/cm ³		
	flash point	> 140 °C		
hardener	viscosity / 20°C	app. 70 mPa s		
	colour	colourless		
	density / 20°C	0.95 g/cm ³		
	flash point	175 °C		
mixture	mixing ratio resin : hardener	100 : 11 pbw		
	viscosity / 20°C	app. 7000 mPa s		
	colour	red brown		
	density / 20°C	1.7 g/cm ³		
	max. temperature (200g, start at 20°C)	app. 100°C		

Continuation Technical Data ISO-POX HC 30000

Properties of cured product (typical values):

mixing ratio resin : hardener	100 : 11 pbw	
colour	Red brown	
density (28 °C)	1.7 g/cm ³	ISO 1183
hardness (Shore D)	90	DIN 53505
temperature index IEC216 (20000 h)	long-time:139 °C	
flammability	V0	UL 94
glas point	75 °C	
bending strength (23 °C)	80 Mpa	ISO 178
deflection	1%	ISO 178
Impact bending strength (23 °C)	8 kJ/m ²	ISO 179
thermal volume expansion coefficient	50 * 10 ⁻⁵ K ⁻¹	ISO 11359-2
dielectric strength	20 kV/mm	DIN 53481
dissipation factor tan δ / 25°C / 50Hz	0.008	DIN 53483
dielectric constant ϵ / 25°C / 50Hz	4.2	DIN 53483
thermal conductivity (28 °C)	0.6 W/K m	ISO 8894
tracing resistance	CTI > 600 KC > 600	IEC 60112 DIN 53480
water absorption after 1 days / 23°C	0.1 %	ISO 62
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 compound well. Heat up (50°C) if partly crystallised. Then mix resin and hardener carefully in recommended ratio for 3 minutes (depending on size of mixture and potlife). The mixture has to be poured into the mould immediately after mixing. Due to sedimentation tendencies of filled resins, material has to be stirred up before use to avoid inhomogenities and wrong dosage. Air bubbles that have been stirred in can be removed before end of potlife by evacuating or by using hot air. Recommended storage temperature:20-25°C.

Machine casting:

Resin storage tank with stirring device is recommended. Suitable cleaning agent for cleaning the machinery is ISO-Clean HP 89/5.

Please see material safety data sheet for additional information.