

NEONIT® K82 L8

(Preliminary data)¹

Description	NEONIT® K82 L8 is a long glass fiber reinforced high temp. epoxy molding compound for applications demanding heat resist., high mech. properties & long term dim. stability at high temp. (as jet engines or indus. equipment), recommended for parts with metal inserts.
Generic identification	
Main filler	Glass fiber
Resin	Epoxy
Color	Dark grey
Molding method	Compression

NEONIT®

	Properties ²	Typical Value ³	Unit	Method	
Physical	Density	1,8	g/cm ³	ISO 1183	
	Apparent density	0,5	g/cm ³	ISO 60	
	Molding shrinkage	0.1-0.3	%	ISO 2577	
	Post shrinkage	-	%	ISO 2577	
	Water absorption	0,1	%	ISO 62	
	Friction coefficient				
	Static		-		
	Dynamic		-		
Thermal	Temperature of deflection under load	>250	°C @ 1.8 MPa	ISO 75 Af	
		>200	°C @ 8.0 MPa	ISO 75 C	
	Thermal conductivity	0,4	W/m K	ASTM E1461	
	Glass transition temperature (Tg)	>220	°C	TMA	
	UL-flammability ⁴				
		mm	-	UL 94	
	mm	-	UL 94		
Mechanical	Coefficient of linear thermal expansion		10 ⁻⁶ /°C	TMA	
		Parallel			
		Perpendicular	10 ⁻⁶ /°C	TMA	
	Flexural strength	260	MPa	ISO 178	
	Flexural modulus	20	GPa	ISO 178	
	Flexural strain at break		%	ISO 178	
	Tensile strength	140	MPa	ISO 527-1	
	Tensile Young's modulus		GPa	ISO 527-1	
Tensile strain at break	<1	%	ISO 527-1		
Electrical	Charpy impact strength	80	kJ/m ²	ISO 179-1	
		80	kJ/m ²	ISO 179-1	
Electrical	Compressive strength	200	MPa	ISO 604	
	Surface resistivity		Ohm	ASTM D257	
	Volume resistivity	5x1015	Ohm cm	ASTM D527	
	Electric strength	180	kV/mm	IEC 60243-1	
	Comparative tracking index (CTI)	600	V	IEC 60112	
	Relative Permittivity (23°C)	6 (@ 1MHz)		IEC 60250	
	Dielectric dissipation factor (23°C)			IEC 60250	

RoHS: NEONIT® K82 L8 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

WEEE: Parts produced from NEONIT® K82 L8 are not subject to 'selective treatment' according to the Directive 2002/96/EC on Waste Electrical and Electronic Equipment.

PFOS: NEONIT® K82 L8 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC: NEONIT® K82 L8 does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA.

¹ Subject to change without notice.

² Properties measured on compression molded test specimens (MPTS - ISO 3167 - as molded).

³ The reported values are averages, and are not intended for specification purposes. Contact your Neopreg representative.

⁴ UL measurement based on internal measurements, not UL-listed.