

Ultrason® E KR 4113

Polyether Sulfone
BASF Corporation

Product Description

Compound based on PES with 30 % filler. The filler system, a mixture of carbon fibres, graphite and PTFE powder, considerably improves Ultrason's tribological properties. In addition, this product has a very small expansion coefficient and low tendency to swell in hot oils. Abbreviated designation according to ISO 1043-1: PESU-(CF+ZD)

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Carbon Fiber Reinforcement, 10% Filler by Weight • Graphite Powder, 10% Filler by Weight • PTFE Fiber, 10% Filler by Weight
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Resin ID (ISO 1043)	• PESU-(CF10+C10+PTFE10)

Physical	Nominal Value	Unit	Test Method
Density	1480	kg/m ³	ISO 1183 ²
Melt volume-flow rate (360°C/10.0 kg)	10.0	cm ³ /10min	ISO 1133 ²
Molding Shrinkage			ISO 2577 ²
Flow	0.31	%	
Across Flow	0.46	%	
Water Absorption			ISO 62 ²
Saturation	1.5	%	
Equilibrium	0.50	%	
Viscosity number	56.0	cm ³ /g	ISO 307, 1157, 1628 ²

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	10100	MPa	ISO 527-2 ²
Tensile Stress (Break)	105	MPa	ISO 527-2 ²
Tensile Strain (Break)	1.3	%	ISO 527-2 ²

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength			ISO 179/1eA ²
-30°C	3.00	kJ/m ²	
23°C	4.50	kJ/m ²	
Charpy impact strength (23°C)	19.0	kJ/m ²	ISO 179/1eU ²
Notched Izod Impact Strength (23°C)	5.00	kJ/m ²	ISO 180/A

Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 961/30)	180	MPa	ISO 2039-1

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa)	220	°C	ISO 75-2 ²
Glass Transition Temperature ³	230	°C	ISO 11357-2 ²
CLTE - Flow			
23 to 80°C	0.000011	cm/cm/°C	ISO 11359-2
140°C	0.000013	cm/cm/°C	DIN 53752

Electrical	Nominal Value	Unit	Test Method
Surface resistivity	1.0E+3	ohms	IEC 60093 ²
Volume resistivity	8.5E+3	ohm·m	IEC 60093 ²
Electric strength	8.0	kV/mm	IEC 60243-1 ²

Injection	Nominal Value	Unit
Processing (Melt) Temp	350 to 390	°C
Mold Temperature	150 to 190	°C

Extrusion	Nominal Value	Unit
Melt Temperature	360 to 390	°C

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Tuesday, December 15, 2009

Notes

¹ Typical properties: these are not to be construed as specifications.

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

³ 10 °C/min

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