Synres-Almoco SI 4554

Silicone

Synres-Almoco BV

Message:

Glass-fibre reinforced silicone compound
Excellent thermal stability - continual use temperatures of up to 300 °C, exceptional electrical properties, good mechanical strength, very good dimensional stability
Primary application(s): Very high heat resistant connectors
This product meets the allowed upper limits for heavy metals and PCAs and also conforms to the requirements of the EU directives 2002/95 (RoHS), 2002/96 (WEEE) and 2006/122 (PFOS)

General Information	
Filler / Reinforcement	Glass Fiber
Features	Good Dimensional Stability Good Electrical Properties Good Strength Good Thermal Stability High Heat Resistance
Uses	Connectors
Agency Ratings	EU 2002/96/EC (WEEE) EU 2006/122/EC
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Injection Molding Resin Transfer Molding

Physical	Nominal Value	Unit	Test Method
Density	2.10 to 2.20	g/cm³	ISO 1183
Apparent Density	0.95 to 1.05	g/cm³	ISO 60
Molding Shrinkage - Flow			ISO 2577
-- [1]	0.40 to 0.80	%	
-- [2]	0.20 to 0.60	%	
Water Absorption (23°C, 24 hr)	< 0.10	%	ISO 62
Post Shrinkage [3]	< 0.050	%	ISO 2577
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Injection Molded)	5000 to 6000	MPa	ISO 527-2
Tensile Stress (Injection Molded)	20.0 to 30.0	MPa	ISO 527-2
Flexural Modulus (Injection Molded)	12000 to 16000	MPa	ISO 178
Flexural Stress (Injection Molded)	60.0 to 80.0	MPa	ISO 178
Compressive Stress	70.0 to 90.0	MPa	ISO 604

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (Injection Molded)	2.0 to 3.5	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (Injection Molded)	4.0 to 6.0	kJ/m²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
1.8 MPa, Unannealed	> 200	°C	ISO 75-2/A
8.0 MPa, Unannealed	> 200	°C	ISO 75-2/C
CLTE - Flow (50 to 150°C)	2.0E-5 to 4.0E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.40 to 0.60	W/m/K	ASTM E1461
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+13 to 1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+14 to 1.0E+15	ohms·cm	IEC 60093
Electric Strength	20 to 30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
	6.00		
100 Hz	4.00		
	6.00		
1 MHz	4.00		
Dissipation Factor			IEC 60250
100 Hz	0.010 to 0.020		
1 MHz	5.0E-3 to 0.010		
Arc Resistance	PLC 4		ASTM D495
Comparative Tracking Index	> 350	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.600 mm, Tested by RASCHIG)	V-0		UL 94
NOTE			
1.	Compression Molded		
2.	Injection Molded		
3.	168 h / 110°C		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China