

CompaMid® PA 6.6 GF 30 HI

Polyamide 66

DimeLika Plast GmbH

Message:

Our new crosslinkable CompaMid® PA 6.6 compounds are thermoplastic polymers which behave like elastomers over a wide temperature range as a result of beta radiation cross-linking. Thanks to crosslinking, the originally thermoplastic material can withstand significantly higher temperatures of up to 400°C, thus providing greater shape retention under thermal load. Due to its excellent performance profile, crosslinkable CompaMid® PA 6.6 can replace costly high-performance plastics such as PPA, PPS or LCP in many cases. No mould changes are required when switching from standard PA 6.6 to CompaMid® PA 6.6, and the process parameters also remain the same.

Electrical Applications

Thanks to their outstanding electrical and mechanical properties, crosslinkable CompaMid® PA 6.6 compounds are ideally suited for applications in the electrical and electronics industries.

Automotive Applications

Crosslinked components made of CompaMid® PA 6.6 are used in the engine bay and exhaust system, where requirements are the toughest for heat resistance and shape retention, as well as resistance to salts, chemicals and corrosive media.

General Information				
Filler / Reinforcement	Glass Fiber,30% Filler by Weight			
Features	Crosslinkable			
	Good Electrical Properties			
	High Impact Resistance			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm ³	ISO 1183
Molding Shrinkage ¹				ISO 294-4
Across Flow : 80°C	0.50	--	%	
Flow : 80°C	0.10	--	%	
Water Absorption				ISO 62
Saturation, 23°C	4.7	--	%	
Equilibrium, 23°C, 50% RH	1.4	--	%	
Viscosity Number	160	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	8500	6000	MPa	ISO 527-2/1
Tensile Stress				ISO 527-2/50
Yield	140	100	MPa	
Break	140	100	MPa	
Tensile Strain				ISO 527-2/50
Yield	3.5	6.0	%	
Break	4.0	6.0	%	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	17	17	kJ/m ²	

23°C	19	25	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	85	85	kJ/m ²	
23°C	90	95	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	210	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	225	--	°C	ISO 75-2/A
Melting Temperature	260	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 80°C	2.5E-5	--	cm/cm/°C	
Transverse : 23 to 80°C	6.0E-5	--	cm/cm/°C	
Heat Distortion	< 400	< 400	°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+10	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.50	--		IEC 60250
Comparative Tracking Index (Solution A)	550	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.800 mm)	HB	--		UL 94
NOTE				

1. 260 °CWZ, 600 Bar

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

