AvaSpire® AV-651 GF50 BG 20

PAEK-GF50 Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**5**	g/10min	ASTM D 1238
Temperature	**400**	°C	-
Load	**2.16**	kg	-

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	**17900**	MPa	ASTM D 638
Tensile Strength	**199**	MPa	ASTM D 638
Elongation at Break	**2.1**	%	ASTM D 638
Flexural Modulus	**16500**	MPa	ASTM D 790
Flexural Strength	**297**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**960**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Melting Temperature	**340**	°C	ASTM D 3418
Glass Transition Temperature	**158**	°C	ASTM E 1356

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	**0.1**	%	ASTM D 570
Density	**1730**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**149**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**366 - 388**	°C	-
Mold temperature	**160 - 190**	°C	-
Zone 1	**365**	°C	-
Zone 2	**371**	°C	-
Zone 3	**377**	°C	-
Nozzle temperature	**382**	°C	-

Characteristics

Processing
Injection Molding, Profile Extrusion

Delivery form
Pellets

Special Characteristics
Flame retardant, Heat stabilized or stable to heat, Sterilizable, Ethylene Oxide (EtO) Sterilization, Steam sterilization, Gamma irradiation sterilization, Electron beam (e-beam) sterilization

Chemical Resistance
General Chemical Resistance, Oil Resistance

Certifications
Biocompatibility ISO 10993

Applications
Automotive, Medical

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa