

AvaSpire® AV-755 SL45

PAEK-(CF+CD)

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	1	g/10min	ASTM D 1238
Temperature	400	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.001	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.013	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	30400	MPa	ISO 527
Yield stress	173	MPa	ISO 527
Strain at break	0.9	%	ISO 527
Flexural modulus, 23°C	30200	MPa	ISO 178
Izod impact strength, +23°C	25	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	6.8	kJ/m ²	ISO 180/1A

ASTM Data	Value	Unit	Test Standard
Tensile Modulus	33600	MPa	ASTM D 638
Tensile Strength	169	MPa	ASTM D 638
Elongation at Break	0.9	%	ASTM D 638
Compressive Strength	120	MPa	ASTM D 695
Flexural Modulus	25900	MPa	ASTM D 790
Flexural Strength	250	MPa	ASTM D 790
Rockwell Hardness	M 88	-	ASTM D 785
Izod Impact notched, 1/8 in	53	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Melting Temperature	343	°C	ASTM D 3418
Glass Transition Temperature	152	°C	ASTM E 1356

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.01	%	ASTM D 570
Density	1530	kg/m ³	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	149 - 177	°C	-
Zone 1	354	°C	-
Zone 2	366	°C	-
Zone 3	371	°C	-
Nozzle temperature	374	°C	-

Characteristics**Processing**

Injection Molding, Profile Extrusion

Delivery form

Pellets, Black

Additives

Lubricants

Chemical Resistance

General Chemical Resistance

Applications

Automotive

Regional Availability

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

Special Characteristics

Flame retardant, Heat stabilized or stable to heat