

AvaSpire® AV-848

Polyaryletherketone
Solvay Specialty Polymers

Message:

AvaSpire® AV-848 is a high-temperature, polyaryletherketone (PAEK) that offers several key performance advantages over comparable grades of PEEK above 150°C, including better dimensional stability, lower CLTE from 150°C to 240°C, and lower modulus for greater flexibility at room temperature.
Natural: AvaSpire® AV-848 NT

General Information	
Features	Good dimensional stability Impact resistance, good Good chemical resistance Fatigue resistance Heat resistance, high ductility Flame retardancy
Uses	Seals Oil/Gas Supplies
RoHS Compliance	Contact manufacturer
Appearance	Natural color
Forms	Particle
Processing Method	Film extrusion Wire & Cable Extrusion Machining Extrusion blow molding Thermoforming Fiber (spinning) extrusion Profile extrusion molding Injection blowing molding Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.32	g/cm ³	ASTM D792
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ¹	3100	MPa	ASTM D638
Tensile Strength ²	94.0	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield ³	6.7	%	ASTM D638

Fracture ⁴	75	%	ASTM D638
Fracture ⁵	35	%	ASTM D638
Flexural Modulus	3300	MPa	ASTM D790
Flexural Strength	134	MPa	ASTM D790
Compressive Strength	118	MPa	ASTM D695
Shear Strength	82.0	MPa	ASTM D732
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	75	J/m	ASTM D256
Unnotched Izod Impact	No Break		ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Annealed)	252	°C	ASTM D648
Glass Transition Temperature	158	°C	ASTM D3418
Peak Melting Temperature	340	°C	ASTM D3418
Specific Heat			DSC
50°C	1650	J/kg/°C	DSC
200°C	1660	J/kg/°C	DSC
Thermal Conductivity	0.22	W/m/K	ASTM E1530
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength (0.0500mm, amorphous film)	180	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	3.21		ASTM D150
1 kHz	3.23		ASTM D150
1 MHz	3.18		ASTM D150
Dissipation Factor			ASTM D150
60 Hz	2.0E-3		ASTM D150
1 kHz	1.0E-3		ASTM D150
1 MHz	6.0E-3		ASTM D150
Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity ⁶	500	Pa · s	ASTM D3835
Injection	Nominal Value	Unit	
Drying Temperature	149	°C	
Drying Time	4.0	hr	
Rear Temperature	366	°C	
Middle Temperature	371	°C	
Front Temperature	377	°C	
Nozzle Temperature	382	°C	
Processing (Melt) Temp	382 - 404	°C	
Mold Temperature	166 - 193	°C	
Injection Rate	Fast		
Screw Compression Ratio	2.0 : 1.0 - 3.0 : 1.0		
Injection instructions			

Back Pressure: Minimum

NOTE

1.	50 mm/min
2.	50 mm/min
3.	50 mm/min
4.	5.1 mm/min
5.	50 mm/min
6.	@400°C/1000 sec-1

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

