ULTEM™ RESIN JD7904

DESCRIPTION

ULTEM JD7904 compound is based on Polyetherimide (PEI) resin containing conductive carbon powder. Added features of this grade include: Anti-Static, Anti-Dust.

TYPICAL PROPERTY VALUES

Revision 20240702

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	84	MPa	SABIC - Japan Method
Tensile Strain, break	4	%	SABIC - Japan Method
Flexural Stress	127	MPa	ASTM D790
Flexural Modulus	3720	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched, 23°C	29	J/m	ASTM D256
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	200	°C	ASTM D648
PHYSICAL [1]			
Specific Gravity	1.31	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm [2]	0.5 – 0.7	%	SABIC method
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+10	Ω	ASTM D257
INJECTION MOLDING [4]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	380 – 410	°C	
Nozzle Temperature	380 – 405	°C	
Front - Zone 3 Temperature	380 – 410	°C	
Middle - Zone 2 Temperature	370 – 400	°C	
Rear - Zone 1 Temperature	360 – 390	°C	
Mold Temperature	140 – 170	°C	
Back pressure (Plastic Pressure)	5 – 10	MPa	
Screw speed (Circumferential speed)	0.1 – 0.2	m/s	
Shot to Cylinder Size	40 – 70	%	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Measurement meets requirements as specified in ASTM D4496.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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