

ULTEM™ RESIN 4211

REGION AMERICAS

DESCRIPTION

20% Glass fiber filled and PTFE filled, standard flow Polyetherimide (Tg 217°C). ECO Conforming.

INDUSTRY	SUB INDUSTRY
Automotive	Heavy Truck, Automotive Under the Hood, Aerospace, Motorcycle, Recreational/Specialty Vehicles
Building and Construction	Building Component
Consumer	Personal Accessory, Home Appliances, Commercial Appliance, Furniture
Electrical and Electronics	Energy Management, Drone Solutions, Mobile Phone - Computer - Tablets, Circuit Boards/Additives, Printer Copier, Speaker - Earphone, Wireless Communication
Industrial	Electrical, Material Handling, Textile, Eyewear
Mass Transportation	Rail
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	129	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D638
Flexural Stress, brk, 2.6 mm/min, 100 mm span	193	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	7100	MPa	ASTM D790
IMPACT			
Izod Impact, Reverse Notched, 3.2 mm	437	J/m	ASTM D256
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	212	°C	ASTM D648
Relative Temp Index, Elec ⁽¹⁾	105	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽¹⁾	105	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽¹⁾	105	°C	UL 746B
PHYSICAL			
Specific Gravity	1.48	-	ASTM D792
Melt Flow Rate, 337°C/6.6 kgf	10.3	g/10 min	ASTM D1238
FLAME CHARACTERISTICS ⁽¹⁾			
UL Yellow Card Link	E121562-524104	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	135	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	10	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	350 – 370	°C	
Nozzle Temperature	350 – 370	°C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	350 – 370	°C	
Middle - Zone 2 Temperature	345 – 365	°C	
Rear - Zone 1 Temperature	340 – 360	°C	
Mold Temperature	135 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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