

# ULTEM™ RESIN 4211

REGION ASIA

## DESCRIPTION

20% Glass fiber filled and PTFE filled, standard flow Polyetherimide (Tg 217C). 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
<b>MECHANICAL</b>			
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
<b>IMPACT</b>			
Izod Impact, Reverse Notched, 3.2 mm	437	J/m	ASTM D256
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	212	°C	ASTM D648
Relative Temp Index, Elec <sup>(1)</sup>	105	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(1)</sup>	105	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(1)</sup>	105	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.48	-	ASTM D792
Melt Flow Rate, 337°C/6.6 kgf	10.3	g/10 min	ASTM D1238
<b>FLAME CHARACTERISTICS <sup>(1)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-524104</a>	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
<b>INJECTION MOLDING</b>			
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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