

SELECTION GUIDE

	GEON® M3710	GEON® M3800	GEON® M3880	GEON® M3900	GEON® M4820	GEON® M4821	GEON® M5240	GEON® M5700	GEON® M6115	FIBERLOC® 80510
Flammability (UL 94 V-0 & 5VA)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
High Impact Resistance		✓	✓	✓	✓		✓			
High Flow	✓	✓	✓	✓	✓	✓		✓	✓	
Low Temp Resistance				✓						
Transparent					✓	✓				
Metallic	✓									
UV Resistance			✓				✓	✓		
Outdoor Stability							✓	✓		
Ball Indentation (75 °C)									✓	
Drying Condition Requirement	✓								✓	



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APPLIANCE



**GEON VINYL
SOLUTIONS
APPLIANCE DESIGN**

PROPERTIES	CONDITION	UNIT	GEON® M3710	GEON® M3800	GEON® M3880	GEON® M3900	GEON® M4820	GEON® M4821	GEON® M5240	GEON® M5700	GEON® M6115	FIBERLOC® 80510	
General Description													
Categorization	-	-	Interior	Interior	Interior	Interior	Interior	Interior	Interior	Exterior	Exterior	High Temp	Glass Fiber Reinforced
Appearance	-	-	Metallic	Opaque	Opaque	Opaque	Opaque	Transparent	Transparent	Opaque	Opaque	Opaque	Opaque
Examples of Applications	-	-	Consoles	Consoles	Consoles	Consoles, Ice Maker Housings	Door Screens	Display Screens	Exterior Applications	Exterior Applications	Consoles	Motor Support Brackets	
Physical Properties													
Specific Gravity	-	-	1.34	1.33	1.33	1.33	1.30	1.32	1.41	1.40	1.35	1.40	
Mold Shrinkage - Flow	-	in/in	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	2.0E-3 to 5.0E-3 (0.20 to 0.50%)	5.0E-4 to 1.5E-3 (0.05 to 0.15%)	
Mechanical Properties													
Tensile Modulus	Type I, 2.0 in/min (51 mm/min)	psi	360,000 (2,480 MPa)	330,000 (2,280 MPa)	375,000 (2,590 MPa)	330,000 (2,280 MPa)	350,000 (2,410 MPa)	403,000 (2,780 MPa)	340,000 (2,340 MPa)	340,000 (2,340 MPa)	385,000 (2,650 MPa)	600,000 (4,140 MPa)	
Tensile Strength at Yield		psi	5,900 (40.7 MPa)	6,000 (41.4 MPa)	6,000 (41.4 MPa)	5,500 (37.9 MPa)	6,500 (44.8 MPa)	7,420 (51.2 MPa)	6,200 (42.7 MPa)	6,200 (42.7 MPa)	7,100 (49.0 MPa)	9,000 (62.1 MPa)	
Tensile Elongation at Break		%	40%	35%	35%	60%	40%	21%	45%	50%	20%	5%	
Flexural Modulus	Type 1, 0.5 in/min (13 mm/min)	psi	350,000 (2,410 MPa)	340,000 (2,340 MPa)	350,000 (2,410 MPa)	330,000 (2,280 MPa)	350,000 (2,410 MPa)	397,000 (2,740 MPa)	350,000 (2,410 MPa)	350,000 (2,410 MPa)	420,000 (2,900 MPa)	550,000 (3,790 MPa)	
Flexural Strength		psi	9,500 (65.5 MPa)	9,700 (66.9 MPa)	9,800 (67.6 MPa)	9,500 (65.5 MPa)	10,000 (68.9 MPa)	11,500 (79.3 MPa)	10,300 (71.0 MPa)	10,300 (71.0 MPa)	11,500 (79.3 MPa)	15,000 (103.0 MPa)	
Impact Properties													
Notched Izod Impact	32°F (0°C), 1/8 in	ft-lb/in	2.0 (110 J/m)	5.0 (270 J/m)	4.0 (210 J/m)	11.0 (590 J/m)	2.0 (110 J/m)	0.6 (30 J/m)	7.0 (370 J/m)	5.0 (270 J/m)	-	0.6 (30 J/m)	
	73°F (23°C), 1/8 in	ft-lb/in	3.0 (160 J/m)	12.0 (640 J/m)	15.0 (800 J/m)	14.0 (750 J/m)	13.0 (690 J/m)	1.1 (60 J/m)	14.0 (750 J/m)	8.0 (430 J/m)	3.4 (180 J/m)	2.0 (110 J/m)	
Durometer Hardness	-	Shore D	73	79	79	75	81	80	79	79	78	82	
Thermal Properties													
Heat Deflection Temperature	66 psi (0.45 MPa), Annealed, 1/4 in	°F	160 (71.1 °C)	167 (75.0 °C)	158 (70.0 °C)	171 (77.2 °C)	163 (72.8 °C)	153 (67.0 °C)	172 (77.8 °C)	172 (77.8 °C)	178 (81.1 °C)	-	
	264 psi (1.8 MPa), Annealed, 1/4 in	°F	154 (67.8 °C)	163 (72.8 °C)	163 (72.8 °C)	163 (72.8 °C)	160 (71.1 °C)	149 (65.0 °C)	169 (76.1 °C)	169 (76.1 °C)	173 (78.3 °C)	169 (76.1 °C)	
RTI Elec	-	°F	194 (90.0 °C)	194 (90.0 °C)	194 (90.0 °C)	194 (90.0 °C)	122 (50.0 °C)	122 (50.0 °C)	194 (90.0 °C)	122 (50.0 °C)	122 (50.0 °C)	122 (50.0 °C)	
RTI Imp	-	°F	185 (85.0 °C)	185 (85.0 °C)	185 (85.0 °C)	185 (85.0 °C)	122 (50.0 °C)	122 (50.0 °C)	185 (85.0 °C)	122 (50.0 °C)	122 (50.0 °C)	122 (50.0 °C)	
RTI Str	-	°F	194 (90.0 °C)	194 (90.0 °C)	194 (90.0 °C)	194 (90.0 °C)	122 (50.0 °C)	122 (50.0 °C)	194 (90.0 °C)	122 (50.0 °C)	122 (50.0 °C)	122 (50.0 °C)	
Flammability													
Flame Rating	All Colors	-	0.1000 in (2.5 mm)	0.0295 in (0.8 mm)	0.0550 in (1.4 mm)	0.0550 in (1.4 mm)	0.0590 in (1.5 mm)	0.0600 in (1.5 mm)	0.0590 in (1.5 mm)	0.0590 in (1.5 mm)	0.0790 in (2.0 mm)	0.0580 in (1.5 mm)	
	All Colors	-	0.1000 in (2.5 mm)	0.0591 in (1.5 mm)	0.0630 in (1.6 mm)	0.1180 in (3.0 mm)	0.0750 in (1.9 mm)	0.0700 in (1.8 mm)	0.0590 in (1.5 mm)	0.0750 in (1.9 mm)	0.0790 in (2.0 mm)	0.0580 in (1.5 mm)	
Processing Information													
Processing (Melt) Temp	-	°F	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	390 to 400 °F (199 to 204 °C)	390 to 400 °F (202 to 204 °C)	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	390 to 410 °F (199 to 210 °C)	