

SMC MATERIALS OVERVIEW CHART

787 Renaissance Parkway | Painesville, OH 44077



PROPERTIES		AS8115(F1)	AS8120(F1)	AS8125(F1)	AS8130(F1)	AS8134	AS8240	AS8250	AS8560	AS8660	AS8763	AS10000-45
Chemistry		Polyester	Polyester	Polyester	Polyester	Polyester	Hybrid	Hybrid	Vinyl Ester	Epoxy	Phenolic	Hybrid
Listed File E80533	-	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No
Flammability UL94	-	V0/5VA	V0	V0	V0	V0	V0	V0				
MECHANICAL PROPERTIES												
Flexural Strength, mpa	D790	115-160	225-270	230-270	230-250	250-300	275-310	355-400	340-380	450-490	370-410	400-450
Flexural Modulus, Gpa	D790	7.5-9.5	9.5-11.5	13-14.4	13.8-15	15.8-17	12.5-14	12.4-13.8	15.8-18	17-19	20.5-24	20-22.7
Tensile Strength, mpa	D638	55-90	80-125	115-160	125-150	130-175	165-190	165-190	170-210	230-270	190-220	110-165
Impact Strength, Notched Izod, J/m	D256	320-420	425-640	535-700	750-850	1150-1300	1300-1500	1300-1500	1870-2100	1550-1950	1350-1500	1300-1600
ELECTRICAL PROPERTIES												
Arc Resistance, Seconds	D495	185+	185+	185+	185+	185+	185+	185+	185+	185+	160+	180+
Dielectric Strength kV/mm	D149	13-15	13.5-15	14-16	14-15	13.5	13+	13+	13.5+	14-16	7+	14-17
PHYSICAL PROPERTIES												
Specific Gravity	D792	1.65-1.75	1.65-1.75	1.65-1.75	1.70-1.80	1.75-1.85	1.75-1.85	1.75-1.85	1.75-1.85	1.70-1.80	1.75-1.85	1.85-1.95
Mold Shrinkage 0.001/in	D955	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	0.5-2.0	1-3	0.5-1.5	1-2.5	0.5-2.0
Barcol Hardness	D2583	35-50	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	30-40
Heat Distortion Temp @ 264 psi Deg C	D648	>260	>260	>260	>260	>260	>260	>260	>260	>260	>260	>260
Water Absorption % in 24 hrs	D570	<0.30	<0.30	<0.30	<0.30	<0.30	<0.20	<0.20	<0.20	<0.20	<0.30	<0.30
Relative Thermal Index	UL746B	130/130/130	130/130/130	130/130/130	130/130/130	-	-	-	-	-	-	-

All property values are based on test performed on standard ASTM test samples and according to standard ASTM test methods unless otherwise indicated. This information is offered solely for your consideration and is to be used as a guide only. No other warranty is implied.

Contact Us:

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