



Structural Thermoset Composite (Bulk)

PRODUCT SERIES: STC 1000 SERIES BMC

PRODUCT DESCRIPTION: POLYESTER, VINYL ESTER AND HYBRID COMPOSITES

Properties	STC-1023		STC-1146A		STC-1246	
Units	Imperial	SI	Imperial	SI	Imperial	SI
Impact Strength-Izod Notched Test Method: ASTM D-256	14 ft.lb./in.	747 J/m	32 ft.lb./in.	1,710 J/m	24 ft.lb./in.	1,280 J/m
Flexural Strength Test Method: ASTM D-790	20,000 psi	138 MPa	37,000 psi	255 MPa	32,000 psi	221 MPa
Flexural Modulus Test Method: ASTM D-790	1,800 ksi	12 GPa	2,300 ksi	16 GPa	2,300 ksi	16 GPa
Tensile Strength Test Method: ASTM D-638	10,000 psi	69 MPa	15,000 psi	103 MPa	13,000 psi	90 MPa
Tensile Modulus Test Method: ASTM D-638			2,700 ksi	19 GPa	2,600 ksi	18 GPa
Water Absorption (24 Hrs @ 23C) Test Method: ASTM D-570	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%
Specific Gravity (+/03) Test Method: ASTM D-792	1.7 to 1.9	1.7 to 1.9	1.55 to 1.75	1.55 to 1.75	1.6 to 1.8	1.6 to 1.8
Shrinkage Test Method: ASTM D-955	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%	0.1 to 0.3%
Barcol Hardness Test Method: ASTM D-2583	30 to 50	30 to 50	30 to 50	30 to 50	30 to 50	30 to 50
Bulk Factor App. Test Method: ASTM D-1895	1	1	1	1	1	1
Dielectric Strength Test Method: ASTM D-149	400 KV/in.	16 KV/mm				
Arc Resistance Test Method: ASTM D-495	180+ Seconds	180+ Seconds				
Heat Deflection Temp @ 264 psi Test Method: ASTM D-648	>500 F	>260 C				
Flame Resistance @ 1/16" Test Method: UL94	V-0 Compliant	V-0 Compliant				

The information on this sheet is a guide. The stated values reflect an average of several tests conducted on Cl's goods. These values were obtained under ideal conditions and may not be replicated in any particular test, part, or application. Because the values achieved in actual parts depend considerably on part design, molding conditions, and testing methods, no guarantee is made or implied regarding values to be obtained in any specific test, part, or application. Cl makes no warranty or representation as to the suitability of any of its goods for use in any application. Cl relies on customer to conduct its own tests and judge for itself the suitability of Cl's goods.

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