



"Dedicated to QUALITY, SERVICE, SAFETY and INNOVATION"

TC-852 FR A/B

RIGID 80 SHORE D POLYURETHANE CASTING SYSTEM

FIRE RETARDANT

PRODUCT DESCRIPTION:

TC-852 FR A/B produces a high impact, rigid 80 Shore D material that is commonly used to make computer housings, models of all kinds, artwork, and can also be used for electronic component encapsulation. TC-852 FR A/B is an excellent hand-castable product that produces parts with heat deflection temperatures up to 192°F (89°C).

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D- 2240	80 ± 2
Specific Gravity, (g/cc) cured ASTM D-792	1.33
Cubic Inches Per Pound.....	21.4
Color/Appearance	Opaque white
Tensile Strength, (psi) ASTM D-638.....	5,300
Tensile Modulus, (psi) ASTM D-638	2.65 x 10 ⁵
Elongation, (%) ASTM D-638.....	3.5
Flexural Strength, (psi) ASTM D- 790	9,000
Flexural Modulus, (psi) ASTM D-790.....	3.0 x 10 ⁵
Shrinkage, (in.lin.) linear (12" x 1/2" x 1/2").....	0.003
Izod Impact, (ft. -lb.lin.) ASTM D- 256	0.50
Heat Deflection Temperature ASTM D-648:	
@ 66 psi	192° ± 5°F (89° ± 3°C)
@ 264 psi.....	187° ± 5°F (86° ± 3°C)

Note: Reported physical properties based on elevated temperature cured test specimens.

HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A	100 parts by weight
Part B	50 parts by weight
Mix Ratio (by volume):	
Part A	100 parts by volume
Part B	50 parts by volume
Specific Gravity, (g/cc):	
Part A	1.32
Part B	1.26
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	200
Part B	2,700
Mixed	700
Color:	
Part A.....	Cream White
Part B	Off White
Work Time, (100-gram mass) @ 77°F (25°C)	4.5 - 5 minutes
Demold Time @ 77°F (25°C).....	1 - 2 hours
Cure Schedule.....	For maximum physical properties the material should be post cured.