



Spec. No.: AWC800  
 Rev: G  
 Effective Date: 03/03/09  
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**TITLE: AWC800 (Red Super Polymer – 95A)**

## Typical Material Characteristics

**Material: AWC800 -- 95A Super Polymer (Red)**

PROPERTY	TEST METHOD	BRITISH	METRIC
<b>Tensile Strength</b>	ASTM D-412	5,000 psi	34.5 MPa
<b>100% Modulus</b>	ASTM D-412	1,800 psi	12.4 MPa
<b>300% Modulus</b>	ASTM D-412	3,400 psi	23.4 MPa
<b>Elongation at Break</b>	ASTM D-412	400%	400%
<b>Specific Gravity</b>	ASTM D-297	1.14	1.14
<b>Tear Strength (Die C)</b>	ASTM D-624	500 lb/in	87.5 kN/m
<b>Compression Set (Method B), % After 22 hrs. at 70°C [158°F]</b>	ASTM 395 (Type 1 Pellet, 25% Deflection)	22	22
<b>Tear Strength (split)</b>	ASTM D-470	150 lb/in	26.2 kN/m
<b>Tear Strength (graves), Die C</b>	ASTM D-624	500 lb/in	87.5 kN/m
<b>Resilience (Rebound)</b>	ASTM D-2632	40%	40%
<b>Abrasion Resistance, NBS Index</b>	ASTM D-630	400	400
<b>Hardness</b>	ASTM D-2240	95 Shore A 46-50 Shore D	95 Shore A 46-50 Shore D
<b>Linear Coefficient of Thermal Expansion,</b>			
-32°F to 32°F (36°C to 0°C)	-	1.27 x 10 <sup>-4</sup> in/in/°F	2.30 x 10 <sup>-4</sup> mm/mm/°C
32°F to 75°F (0°C to 24°C)	-	0.89 x 10 <sup>-4</sup> in/in/°F	1.60 x 10 <sup>-4</sup> mm/mm/°C
75°F to 212°F (24°C to 100°C)	-	0.89 x 10 <sup>-4</sup> in/in/°F	1.60 x 10 <sup>-4</sup> mm/mm/°C
212°F to 302°F (100°C to 150°C)	-	0.69 x 10 <sup>-4</sup> in/in/°F	1.24 x 10 <sup>-4</sup> mm/mm/°C
<b>Electrical Properties</b>			
Dielectric Constant			
at 75°F (24°C)	-	7.25	4.35
Power Factor			
at 75°F (24°C)	-	9.25	7.58
DC Volume Resistivity			
at 75°F (24°C)	-		3.7 x 10 <sup>10</sup> ohm-cm

**Note: The material properties were obtained under controlled laboratory conditions. The data and information are intended as only a guide to be used at your discretion and risk. A.W. Chesterton specifically disclaims any and all direct and indirect damages or losses resulting from the use of any information, data, or products described.**