

Physical Testing

The following test results demonstrate why Akton® polymer is so unique. Its ability to maintain its shape, stretch, deflect an applied load and absorb shock make it an ideal material for many applications. Action Products also has a wide selection of independent and in-house studies pertaining to its clinical effectiveness, appropriateness for vibration damping, response to heat and humidity, use as a bolus material, toxicity and fire ratings. These are available upon request.

ASTM D 412-98a Rubber Properties in Tension						
Sample No.	100% Modulus (PSI)	200% Modulus (PSI)	300% Modulus (PSI)	Peak Tensile (PSI)	Ultimate Elongation (%)	Shore A Hardness (pts)
1	2.6	3.2	4.8	16.9	959.1	N/A
2	3.1	4.0	5.3	22.7	1060.3	
3	2.6	3.9	5.6	18.4	1030.0	
Median	2.6	3.9	5.3	18.4	1030.0	

ASTM D 575-91(96) Compression Deflection, Method A 25% Deflection	
Sample No.	Lbs. per Square Inch
1	0.66
2	0.63
3	0.63
Median	0.63

ASTM D 575-91(96) Compression Deflection, Method A 50% Deflection	
Sample No.	Lbs. per Square Inch
1	3.45
2	3.10
3	3.47
Median	3.45

ASTM D 395-97 Compression Set, 22 hrs @ 25% Compression Room Temperature	
Sample No.	Lbs. per Square Inch
1	0
2	0
3	0
Median	0

ASTM D 395-97 Compression Set, 22 hrs @ 50% Compression Room Temperature	
Sample No.	Lbs. per Square Inch
1	0
2	0
3	0
Median	0

ASTM D 1054-91 Resilience Using a Rebound Pendulum					
Sample No.	Rebound Resistance, R, %			Median	Average
1	7.2	6.6	6.2	6.6	6.7
2	9.4	9.0	8.2	9.0	8.9

ASTM D 624-98 Die C Tear	
Sample No.	Tear Strength, Lbs/ In.
1	3.4
2	3.5
3	2.7
Median	3.4

In a test conducted by the nation's leading independent ballistics lab, H.P. White Laboratory, Inc. of Aberdeen, MD, an Action Products KICK KILLER Recoil Pad reduced the mean peak recoil more than twice as effectively as the leading competitive pad. The test was a Winchester ranger pump action shotgun chambered for 12 gauge 3" magnum load.



AKTON pads also reduce time of peak impact to shoulder