

POLYBALL

Technical Data Sheet

Elastomeric Polyurethane Physical Properties

TEST SPECIFICATION	ASTM #	PHYSICALS		
		75A	80A	90A
Durometer	D2240			
10% Modulus	D412	200 PSI	300 PSI	500 PSI
100% Modulus	D412	500 PSI	800 PSI	1200 PSI
200% Modulus	D412	700 PSI	1100 PSI	1500 PSI
300% Modulus	D412	1000 PSI	1600 PSI	2000 PSI
Tensile Strength	D412	2000 PSI	3300 PSI	3500 PSI
Elongation	D412	500%	460%	440%
Tear Strength (Die C)	D1938	390 PLI	510 PLI	650 PLI
Tear Strength (Nick)	D624	120 PLI	170 PLI	180 PLI
Bashore Rebound	D2632	75%	63%	60%
Compression Set	D395	10%	13%	22%

Material meets compliance criteria of FDA regulation 21 CFR 177.1680, regarding products which come in contact with dry, aqueous and fatty foods.

ASTM TEST METHODS

Modulus (Tensile strength at a given elongation): The stress required to stretch the uniform cross section of a test specimen to a given elongation.

Tensile Strength: The maximum tensile stress applied stretching a specimen to rupture.

Elongation: The elongation at time of rupture.

Tear Strength (Die C): The force in pounds necessary to tear a test specimen.

Tear Strength (Nick), also Trouser Tear: The force in pounds necessary to propagate an initial tear across a sheeting specimen.

Bashore Rebound: The determination of impact resilience of material from measurement of the vertical rebound of a dropped weight.

Compression Set: The determination of amount of set a material exhibits after being subjected to a compressive stress of 25% deflection for 22 hours at 158F (70C).

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