



Since 1890

THE AKRON PORCELAIN & PLASTICS COMPANY

Manufacturers of Ceramic & Plastic Components

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Frac Ball Material Properties

Description: The following materials are tailored to meet the performance requirements for Frac Balls for the oil and gas industry. The alternative fillers listed provide strength and weight options. All are compression molded, thermoset materials.

		Properties for various density materials					
		FB-129	FB-142	FB-170HS	FB-175	FB-198	FB-365
Property	ASTM Test Method	Light Weight Short Glass Filled Polyester	Light Weight Short Glass Filled Polyester	High Strength Long Glass Filled Hybrid Resin	Short Glass Filled Phenolic	Short Glass Filled Polyester	Heavy Weight Iron Filled Phenolic
Specific Gravity	D792	1.29 +/- 0.1	1.42 +/- 0.1	1.70 +/- 0.1	1.75 +/- 0.1	1.98 +/- 0.1	3.65 +/- 0.2
Flexural Strength	D790	8,000 psi	12,000 psi	45,000 psi	17,300 psi	21,000 psi	9,900 psi
Compressive Strength	D695	20,000 psi	20,000 psi	38,000 psi	36,700 psi	30,100 psi	27,000 psi
Tensile Strength	D638	5,000 psi	5,000 psi	25,000 psi	10,100 psi	11,000 psi	5,100 psi
Deflection Temperature @ 1.82Mpa	D648	340 deg F	340 deg F	380 deg F	440 deg F	425 deg F	375 deg F

The values listed were obtained under laboratory conditions as according to the specified ASTM method. Performance in the field may vary. No guarantee, warranty or representation, express or implied is made for the performance of Akron Porcelain and Plastics materials. Each user must test and validate the suitability of these materials for their specific application.

