



Potters Industries Inc.
an affiliate of PQ Corporation

ENGINEERED GLASS MATERIALS DIVISION

HOLLOW MICROSPHERES

SPHERICEL® GENERAL PRODUCT CHARACTERISTICS

Composition: Fused Borosilicate Glass (ASTM C169)
 Shape: Hollow non-porous microspheres
 Color: White (min. 90.0 L value on dry powder)
 Hardness: 6 Moh's scale
 Alkalinity: Max 0.5 meq/gr (ASTM D3100)
 Loss on Drying: Max. 0.5 weight % (10 min. @ 250°F)

	<u>SPHERICEL®</u>			
	<u>110P8</u>	<u>60P18</u>	<u>34P30</u>	<u>25P45</u>
<u>DENSITY</u> (ASTM D2840) grams/cc	1.10 ± 0.05	0.60 + 0.05	0.34 + 0.05	0.25 ± 0.02
<u>STRENGTH, psi</u>	10,000	8,000	3,000	750 psi
<u>OIL ABSORPTION</u> (ASTM D281)* g oil/100 g g oil/100cc	32 36	48 30	44 14	
<u>PARTICLE SIZE, µm</u> Average Size	9 – 13	16 – 20	29 – 31	40 – 60
<u>SIZE DISTRIBUTION</u> (microns)				
90% finer than	19 – 21	28 – 32	44 – 46	55 – 75
50% finer than	9 – 11	15 – 19	26 – 30	40 – 60
10% finer than	4 – 5	6 – 10	15 – 18	15 – 30

*Spherichel® hollow glass microspheres do not absorb oil. The value reported is the amount of oil necessary to wet the surface of the glass.

PQ Corporation is a privately held global enterprise operating in 20 countries, with annual revenues in excess of \$500 million. PQ is a leading producer of silicate, zeolite, and other performance materials serving the detergent, pulp and paper, chemical, petroleum, catalyst, water treatment, construction, and beverage markets.

Potters Industries, PQ's wholly owned subsidiary, is a leading producer of engineered glass materials serving the highway safety, polymer additive, fine abrasive, and conductive product markets.