



# PRODUCT DATA

## FilPro® FILTRATION SANDS AND GRAVEL

PLANT: MAURICETOWN, NEW JERSEY

FilPro® Filtration Sands are produced from hard ore quartz sands. Resistant to degradation during handling and backwashing, these durable sands effectively perform in a filter to reduce detention time and optimize flow rates.

The subangular grain shape of FilPro media will provide solids holding capacity and a transport mechanism of any filter design. FilPro grades are engineered to optimize the performance of air scour potable water filters and tertiary filtration systems and have been proven effective in iron and manganese removal, industrial process water filtration and waste treatment systems.

All FilPro grades are processed and sized with strict adherence to quality assurance controls and meet AWWA, B-100, and ANSI standards for consistently uniform and chemically inert filter media. They are certified under NSF-61 by the National Sanitation Foundation.

### TYPICAL PARTICLE SIZE ANALYSIS AND PROPERTIES

These do not represent a specification.

<u>ASTM E-11</u>				
<u>Mesh*</u>	<u>mm</u>	<u>0.95</u>	<u>1.25</u>	<u>1.45</u>
4	4.76	0.0	0.0	0.0
8	2.38	0.1	1.4	13.6
12	1.68	3.2	31.4	49.2
16	1.19	60.1	54.7	33.3
20	.84	31.3	11.1	3.2
25	.71	3.0	0.5	0.2
30	.60	1.3	0.3	0.1
35	.50	0.5	0.2	0.1
40	.42	0.3	0.1	0.1
50	.30	0.1	0.1	0.1
70	.21	0.1	0.1	0.1
PAN		0.0	0.1	0.0

\*Typical mean percent retained on individual sieves.

	<u>0.95</u>	<u>1.25</u>	<u>1.45</u>
Avg. Effective Size (mm)	0.96	1.16	1.37
Range Effective Size (mm)	0.85-1.00	1.00-1.50	1.25-1.75
Max. Uniformity Co-efficient	<1.8	<1.5	<1.5

Bulk Density, Aerated (lb./ft.<sup>3</sup>)..... 92-95  
 Bulk Density, Compacted (lb./ft.<sup>3</sup>)..... 98-100  
 Grain Shape..... Subangular  
 Hardness (Mohs)..... 7

Specific Gravity ..... 2.65  
 SiO<sub>2</sub> (Silicon Dioxide - %)..... 99  
 Other (%)..... 1

April 15, 2009

**DISCLAIMER:** The information set forth in this Product Data Sheet represents typical properties of the product described; the information and the typical values are not specifications. U. S. Silica Company makes no representation or warranty concerning the Products, expressed or implied, by this Product Data Sheet.

**WARNING:** The product contains crystalline silica - quartz, which can cause silicosis (an occupational lung disease) and lung cancer. For detailed information on the potential health effect of crystalline silica - quartz, see the U. S. Silica Company Material Safety Data Sheet.



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**TYPICAL PARTICLE SIZE ANALYSIS AND PROPERTIES**

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<u>ASTM E-11</u>										
Mesh*	mm	<u>0.35</u>	<u>0.40</u>	<u>0.45</u>	<u>0.50</u>	<u>0.55</u>	<u>0.60</u>	<u>0.65</u>	<u>0.70</u>	<u>0.85</u>
12	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	3.5
16	1.19	0.0	0.0	0.1	1.3	2.6	2.0	24.0	37.2	52.4
20	.84	0.0	0.2	1.4	19.5	33.3	38.6	36.5	36.6	35.7
25	.71	1.1	6.8	6.7	19.5	26.7	33.1	21.8	14.8	4.9
30	.60	7.3	32.0	34.3	27.5	20.8	19.6	12.8	7.2	2.2
35	.50	31.8	39.8	41.5	23.8	12.6	5.5	3.3	1.6	0.8
40	.42	33.2	12.8	11.9	6.0	2.8	0.8	0.4	0.3	0.2
50	.30	23.9	7.1	3.7	1.9	1.0	0.2	0.1	0.2	0.1
70	.21	2.1	0.8	0.3	0.3	0.1	0.1	0.1	0.1	0.1
PAN		0.6	0.5	0.1	0.2	0.1	0.1	0.1	0.1	0.1

\*Typical mean percent retained on individual sieves.

	<u>0.35</u>	<u>0.40</u>	<u>0.45</u>	<u>0.50</u>	<u>0.55</u>	<u>0.60</u>	<u>0.65</u>	<u>0.70</u>	<u>0.85</u>
Avg. Effective Size (mm)	0.34	0.43	0.46	0.51	0.55	0.61	0.65	0.71	0.87
Range Effective Size (mm)	0.30-0.40	0.35-0.45	0.40-0.50	0.45-0.55	0.50-0.60	0.55-0.65	0.60-0.70	0.65-0.75	0.80-0.90
Max. Uniformity Co-efficient	<1.6	<1.4	<1.6	<1.7	<1.7	<1.5	<1.7	<1.8	<1.7

Bulk Density, Aerated (lb./ft. <sup>3</sup> ).....	92-95	Specific Gravity.....	2.65
Bulk Density, Compacted (lb./ft. <sup>3</sup> ).....	98-100	SiO <sub>2</sub> (Silicon Dioxide - %).....	99
Grain Shape.....	Subangular	Other (%).....	1
Hardness (Mohs).....	7		

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