

Silica/Sand Specifications

Particle Size Analysis and Properties

Mean Values. These Do Not Represent A Specification.

Typical Mean % Retained on Individual Sieves

Mesh ASTM E-11	<u>4075</u>	<u>4030</u>	<u>4020</u>	<u>4010</u>	<u>5020</u>	<u>5015</u>	<u>5010</u>	<u>5005</u>	<u>7040</u>	<u>7020</u>
20	.02	-	-	-	-	-	-	-	-	-
30	15.0	4.0	1.0	0.5	0.1	-	-	-	-	-
40	50.0	33.0	19.0	10.5	3.5	1.0	0.5	TR	-	-
50	25.0	37.5	35.0	31.0	21.0	15.0	11.0	4.5	0.5	0.5
70	6.5	15.5	25.0	29.0	34.0	32.5	30.0	31.0	17.5	14.0
100	2.5	7.5	15.0	21.0	30.	35.0	37.5	42.5	62.0	51.5
140	0.5	2.1	4.0	7.0	10.	14.0	17.0	17.5	24.	26.5
200	0.1	0.3	0.7	1.1	1.4	2.5	3.5	4.0	5.5	6.5
270	-	-	-0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.8
PAN	-	-	-	-	TR	TR	TR	0.1	0.1	0.1
GFN	34.0	41.0	48.0	53.5	60.	65.0	68.5	71.0	78.0	81.0

Grain Shape

Hardness

Moisture Content

Specific Gravity

Bulk Density, aerated

Bulk Density, compacted

Subround

7.0 Mohs

<0.1%

2.65 g/cm³

92-95 lb/ft³

98-100 lb/ft³

Visual

Mohs Scale

ASTM C-566

ASTM C-128

ASTM C-29

ASTM C-29

Chemical Analysis

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Mean Percent by Weight

Silicon Dioxide	(SiO ₂)	99.615
Iron Oxide	(Fe ₂ O ₃)	.018
Aluminum Oxide	(Al ₂ O ₃)	.150
Calcium Oxide	(CaO)	.009
Titanium Dioxide	(TiO ₂)	.015
Magnesium Oxide	(MgO)	.008
Potassium Oxide	(K ₂ O)	.095
Sodium Oxide	(Na ₂ O)	.005
Loss on ignition	(LOI)	.085