

# TECHNICAL DATA



## MINERAL FILLERS

### FEATURES AND BENEFITS

BYRON, CA

Mineral Fillers are produced from industrial quartz sands for a wide variety of industrial and contractor mixed applications which need a reliable silica contribution or require a chemically inert structural filler. Consistently uniform grain shapes and particle size distributions offer excellent placement, compaction and mechanical properties. High silica content combined with low level soluble ions, alkalis and alkaline oxides provide non-reactive service in most corrosive and exposed environments.

These durable monocrystalline structures resist abrasion in high traffic-excessive wear applications and provide the stability formulators seek in high solids emulsions, elastomerics, cemented and modified cementitious systems.

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### PARTICLE SIZE ANALYSIS AND PROPERTIES

Typical Values. These Do Not Represent A Specification.

	Mesh Size		4075	4010	Typical Range % Retained on Individual Sieves
	ASTM	Microns			
18		1.00mm	---	---	
20		850	1.0-8.0	---	
30		600	31-60	0.2-2.5	
40		425	23-52	9.0-17.5	
50		300	2.0-8.0	19.0-28.0	
70		212	0.5-4.0	20-28.5	
100		150	0.1-3.0	16-22.5	
140		106	0.0-1.5	8.0-17.5	
200		75	0.0-0.5	2.5-7.0	
270		53	---	0.4-2.0	
PA		PAN	---	0.1-1.0	
N					

Grain Shape	Subangula r	Visual
Hardness (Mohs)	7.0	Moh's Scale
Moisture Content (%)	<0.1	ASTM C-566
Specific Gravity (g/cm <sup>3</sup> )	2.65	ASTM C-128
Bulk Density, loose (lb/ft <sup>3</sup> )	92-95	ASTM C-29
Bulk Density, compacted (lb/ft <sup>3</sup> )	98-100	ASTM C-29

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## CHEMICAL ANALYSIS

Mean Values. These Do Not Represent A Specification.

### Mean Percent by Weight

		<u>4075</u>	<u>4010</u>
Silicon Dioxide	(SiO <sub>2</sub> )	95.44	91.20 – 92.75
Iron Oxide	(Fe <sub>2</sub> O <sub>3</sub> )	0.14	0.11 - 0.20
Aluminum Oxide	(Al <sub>2</sub> O <sub>3</sub> )	2.33	3.5 - 4.8
Calcium Oxide	(CaO)	0.02	0.02-0.08
Titanium Dioxide	(TiO <sub>2</sub> )	0.03	0.04-0.14
Magnesium Oxide	(MgO)	0.01	0.01-0.03
Potassium Oxide	(K <sub>2</sub> O)	1.62	2.6-3.2
Sodium Oxide	(Na <sub>2</sub> O)	0.12	0.2-0.4
Loss on Ignition	(L.O.I.)	0.29	0.23-0.45

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## ORDERING INFORMATION

Shipping Point: BYRON, CA

Availability: BULK ONLY  
TRUCK ONLY

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GRADE NUMBERS INDICATE RELATIVE VALUES OR RESULTS. THEY ARE NOT A SPECIFICATION OR WARRANTY OF PERFORMANCE.

HEALTH HAZARD WARNING: Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC has determined that crystalline silica, inhaled from occupational sources, can cause cancer in humans. Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current material safety data sheets, containing safety information, are available and should be consulted before usage.

Silica/Silica Containing