

FEATURES & BENEFITS

PURESIL® Low Iron Sand is produced from high-purity, whole grain crystalline silica with a remarkably low iron content. Unique deposit chemistry is further enhanced by mechanical and chemical beneficiation to provide batch formulators with a consistent chemistry and iron levels consistently below 0.0090%.

All PURESIL grades are processed with rigid adherence to Covia QIPSM quality assurance programs to produce a chemically pure silicon dioxide source with a stable alkali constituent and only trace accessory minerals. Consistently uniform particle size distributions and the statistically accurate removal of coarse and fine grains also offer manufacturers a more uniform melt with lower energy requirements and greater control over batch economics.

PURESIL chemistry and consistency make it ideally suited for the processing and manufacture of decorative and table glass, fused and calcined silica, specialty glasswares and sodium silicates.

PARTICAL SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Mesh Size		
	ASTM	MICRONS	PURESIL®
Typical Mean % Retained on Individual Sieves	20	850	-
	30	600	0.08
	40	425	3.8
	50	300	26.1
	70	210	39.0
	100	150	20.6
	140	105	8.1
	200	75	1.9
	270	53	0.7
	PAN	PAN	0.1

PHYSICAL PROPERTIES

Typical Mean Values. These Do Not Represent A Specification.

PURESIL® Low Iron Sand		
Melting Point (°F/°C)	3135/1724	ASTM C-24
Specific Gravity (g/cm ³)	2.65	ASTM C-128
Moisture Content (%)	<0.1	ASTM C-566
Bulk Density, Loose (lb/ft ³)	92-95	ASTM C-29
Bulk Density, Compacted (lb/ft ³)	98-100	ASTM C-29

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

Typical Mean Percent by Weight	
Silicon Dioxide (SiO ₂)	99.960
Iron Oxide (Fe ₂ O ₃)	0.008
Aluminum Oxide (Al ₂ O ₃)	0.033
Calcium Oxide (CaO)	0.003
Magnesium Oxide (MgO)	0.001
Potassium Oxide (K ₂ O)	0.005
Titanium Dioxide (TiO ₂)	0.006
Sodium Oxide (Na ₂ O)	0.002
Zirconium dioxide (ZrO ₂)	0.004
Loss on Ignition (LOI)	0.015

ppm	
Chromium Oxide (Cr ₂ O ₃)	<1.0
Nickel Oxide (NiO)	<1.0
Manganese (Mn)	0.776

SHIPPING/ORDERING INFORMATION

- Shipping Point: Junction City, GA
- Delivering Carrier: CSX Rail Systems
- Availability: Bulk Only
Truck and Rail

CUSTOMER SERVICE

US & Canada: 1-800-243-9004
Fax: 1-800-243-9005
Worldwide: 1-203-442-2500
Fax: 1-203-972-1378

3 Summit Park Drive, Suite 700, Independence, OH 44131 | CoviaCorp.com

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

Health Hazard Warnings: 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 and NTP have determined that crystalline silica can cause lung 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 safety data sheet, containing safety information, is available and should be consulted before usage.

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Silica/Silica Containing

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