

FEATURES & BENEFITS

The PREMIERE® line of ball clays is designed to maximize performance in pressed and extruded ceramic processes. A composition of fine-grained kaolinite, illite, and quartz, these clays will produce excellent strength characteristics over a wide moisture range. The lower carbon containing materials typical of the PREMIERE line makes them ideal body components for fast firing. An absence of oxidation sources also means minimal disturbance to glazed surfaces, in either single or twice fired processing. The consistency of these clays will provide excellent control over thermal expansion, dimensional accuracy, and fired color.

A complete range of PREMIERE clay blends is available to achieve diverse formulation and production objectives. Higher potassium content grades will deliver optimum firing behavior over a wide temperature range, and can be used to produce compatible glazes and frits. High strength grades meet the exacting requirements for the production of large format tile, while providing consistent fired color. The PREMIERE line is ideally suited for ceramic processes which require excellent plasticity, including dinnerware, floor and wall tile, and electrical porcelain.

All PREMIERE grades are mined, processed and sized under Covia QIPSM statistical quality assurance programs. The result is consistent chemistry and uniform particle size distribution for controlled forming characteristics and predictable firing performance.

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Typical Mean Percent By Weight on Oxide Basis	
	WT	RD
Silicon Dioxide (SiO ₂)	58.1	65.0
Aluminum Oxide (Al ₂ O ₃)	26.0	16.5
Titanium Dioxide (TiO ₂)	1.2	0.9
Iron Oxide (Fe ₂ O ₃)	2.4	7.5
Calcium Oxide (CaO)	0.3	0.3
Magnesium Oxide (MgO)	0.7	1.0
Potassium Oxide (K ₂ O)	2.9	2.5
Sodium Oxide (Na ₂ O)	0.2	0.8
Loss on Ignition (LOI)	7.9	5.5
Carbon	0.3	0.2

PHYSICAL PROPERTIES

Typical Mean Values. These Do Not Represent A Specification.

PREMIERE® Pressing Clay	WT	RD
M.B.I. (meq/100g)	9.0	7.3
SSA m ² /g	19.5	20.2
pH @10% Solids	5.0	7.0
M.O.R. (Dried @110°C) (lbf/in ²) -Pressed bars of 100% clay	700	850

PARTICLE SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Microns	WT	RD
% Finer	<20	96.0	85.0
	<10	88.0	70.0
	<5	72.0	56.0
	<2	48.0	39.0
	<1	35.0	28.0
	<0.5	24.0	20.0

SHIPPING/ORDERING INFORMATION

- Shipping Point: Huntingburg, IN
- Availability: Bulk, IBC, 50 LB Bags
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

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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 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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