

## 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 excellent 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 QIP<sup>SM</sup> 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 On Oxide Basis	
	AT	BL
Silicon Dioxide (SiO <sub>2</sub> )	63.1	60.6
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	24.4	26.2
Titanium Dioxide (TiO <sub>2</sub> )	1.2	1.3
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.2	1.3
Calcium Oxide (CaO)	0.1	0.1
Magnesium Oxide (MgO)	0.3	0.3
Potassium Oxide (K <sub>2</sub> O)	0.6	0.5
Sodium Oxide (Na <sub>2</sub> O)	0.1	0.1
Loss on Ignition (L.O.I.)	8.7	9.4
Carbon Content (%C)	0.2	0.3
Sulfur (%S)	0.2	0.2

## PHYSICAL PROPERTIES

*Typical Mean Values. These Do Not Represent A Specification.*

PREMIERE® Pressing Clay	AT	BL
SSA (m <sup>2</sup> /g)	24.5	26.5
M.B.I. (meq/100g)	10.5	10.7
M.O.R. (Dried @ 230°C) (lbf/in <sup>2</sup> )	660	730
% Liner Shrinkage Dry-Fired 1120°C	3.9	5.0
pH @10% Solids	4.5	4.0

## PARTICLE SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Microns	AT	BL
% Finer	<20	92	94
	<10	85	89
	<5	78	83
	<2	65	71
	<1	56	62
	<0.5	47	52

## SHIPPING/ORDERING INFORMATION

- Shipping Point: Troup, TX
- 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

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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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