

FEATURES & BENEFITS

The STARCAST® line of kaolin clays is designed specifically for customers who wish to prepare quality casting slips with shredded or blended raw materials. A unique combination of particle size distribution, rheology, and mineralogy, STARCAST will improve casting rate and deflocculant response in traditional, automated and pressure cast applications. All grades are low in residue and carbon, and provide excellent suspension properties, stable viscosity and improved plasticity.

These clays are suitable for traditional to highly automated casting applications and will aid the manufacturing process for smaller ornamental wares through to the largest dimension industrial pieces. Available in crushed, sliced or airfloated forms, The STARCAST line will facilitate high quality casting performance throughout the entire casting curve and over the full density range. In certain applications higher than normal slip densities can be achieved.

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

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

Typical Mean Percent by Weight on Oxide Basis				
	SP-100	K-27	K-88	K-SP*
Silicon Dioxide (SiO ₂)	45.20	45.00	44.50	44.70
Aluminum Oxide (Al ₂ O ₃)	38.60	38.00	38.50	38.90
Titanium Dioxide (TiO ₂)	1.65	1.78	1.50	1.60
Iron Oxide (Fe ₂ O ₃)	0.34	0.92	0.55	0.30
Calcium Oxide (CaO)	0.10	0.21	0.04	0.03
Magnesium Oxide (MgO)	0.13	0.10	0.01	0.10
Potassium Oxide (K ₂ O)	0.10	0.15	0.10	0.10
Sodium Oxide (Na ₂ O)	0.08	0.17	0.10	0.08
Loss on Ignition (LOI)	13.80	13.70	13.70	13.80

PHYSICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

STARCAST® Kaolin Casting Clays	SP-100	K-27	K-88	K-SP*
M.B.I. (meq/100g)	2.1	8.0	1.9	2.0
SSA m ² /g	11.4	20.0	10.0	10.5
pH @10% Solids	5.0	7.0	6.0	5.0
Dry M.O.R. @230°F (lbf/in ²)	170	400	140	150

PARTICLE SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Mesh Size	STARCAST® Grades			
	Microns	SP-100	K-27	K-88	K-SP*
% Finer	<20μ	97	95	93	97
	< 10μ	89	94	86	88
	< 5μ	78	90	73	77
	< 2μ	56	80	52	56
	< 1μ	44	71	37	41
	< 0.5μ	25	52	18	25

SHIPPING/ORDERING INFORMATION

- Shipping Point: McIntyre, GA
- Originating Rail Carrier: Norfolk Southern
- Availability: Bulk, IBC
*K-SP available in Bulk, IBC, 50 lb Paper Bag
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: Long term exposure can cause pneumoconiosis. This material contains crystalline silica which can cause pneumoconiosis. Pneumoconiosis is a respiratory disease, which can result in delayed, disabling and sometimes fatal lung injury. 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. Avoid creating dust when handling, using or storing. Use only with adequate ventilation to keep exposure below recommended exposure limits. Follow OSHA or other relevant safety and health standards for "Particulates not otherwise classified" (PNOC) and for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.

Notice: While information contained herein is correct to the best of our knowledge, Covia hereby disclaims any warranties as to the accuracy of the same. Recommendations or suggestions are made without guarantee or representation as to result, since conditions of usage are beyond our control. All materials are sold subject to Covia's standard terms and conditions of sale and the condition that buyer shall make his own tests to determine the suitability of such product for buyer's purpose. No statement contained herein shall be construed as a recommendation to infringe any patent.

Kaolin/Silica Containing

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