



A subsidiary of ZEMEX Corporation

EPK KAOLIN

■ DESCRIPTION

EPK Kaolin is a unique, high quality water washed ceramic kaolin which offers very white fired color, unusually good forming characteristics and high green strength. In glazes, EPK offers excellent suspension capabilities and uncommon cleanliness.

■ TYPICAL PHYSICAL PROPERTIES

Mineral Content (X-Ray Diffraction):
Kaolinite (Al₂O₃, 2SiO₂, 2H₂O) - 97%

Screen Residue:
Water washed through screen:
Pellet (Prill) 1.6 +325 mesh
Airfloated 1.2 +325 mesh

Surface Area (m²/g): 25.59

Average Particle Size (µm):
1.02

Free Moisture:
Pellet (Prill) 3.0% +325 mesh
Airfloated 1.0% +325 mesh

Bulk Density (lb./ft.³):
Loose 32.4
Packed 46.2

■ TYPICAL CERAMIC PROPERTIES

pH (10% Solids – Wt.): 6.0

Viscosity:
10,000 CPS @ 35% solids wt.

Water of Plasticity (%): 26.0

Dry Modulus of Rupture:
300 psi

Linear Dry Shrinkage(%): 5.8

Fired Shrinkage – Cone 11 (1315°C):
11.6%

Absorption – Cone 11:
11.3%

Fired Color (100% Clay, Cone 11):
95.1

Fired Shrinkage – Cone 11:
11.6%

**Cation Exchange Capacity
(Methylene Blue Index):**
3.7 meq./100 grams

■ TYPICAL CHEMICAL PROPERTIES

Chemical Analysis: (%)

SiO ₂	45.73
Al ₂ O ₃	37.36
Fe ₂ O ₃	0.79
TiO ₂	0.37
P ₂ O ₅	0.236
CaO	0.18
MgO	0.098
K ₂ O	0.33
Na ₂ O	0.059
Loss on Ignition	13.91

■ CASTING PROPERTIES

Drainage: Excellent

Type of Cast: Plastic

Water Retention (%): 24.81

Availability:
Pellet (Prill): Bulk, 2000 lb. bags
Airfloated: Bulk, 50 lb. bags

Shipping Point (Truck/Rail):
Edgar, FL



ISO 9001:2000
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ZEMEX Industrial Minerals, Inc.
1040 Crown Pointe Parkway, Suite 270
Atlanta, Georgia 30338
Phone: (770) 392-8660
Fax: (770) 392-8670
Customer Service: (828) 765-8984

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WARNING: This product contains free Silica (Quartz). Repeated and prolonged inhalation of dust in excess of TLV-TWA may cause delayed lung injury (Silicosis). Follow applicable OSHA, MSHA, or NIOSH standards for Crystalline Silica (Quartz). IARC has classified Crystalline Silica in Group 1, Carcinogenic to Humans, based on sufficient evidence for the carcinogenicity of Crystalline Silica in humans. The National Toxicology Program has listed crystalline silica (respirable) as a substance which may reasonably be anticipated to be a carcinogen. Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer.