

10.150 - PHYSICAL & CHEMICAL PROPERTIES GRADE - WHITE



High Reactivity Metakaolin (HRM)

Advanced Cement Technologies' PowerPozz™ HRM is a manufactured pozzolanic mineral admixture which significantly enhances many performance characteristics of cement-based mortars, concretes and related products.

PowerPozz™, derived from purified kaolin clay, is a white, amorphous, alumino-silicate which reacts aggressively with calcium hydroxide to form compounds with cementitious value.

Used at 5-15% replacement of cement by weight, PowerPozz™ will contribute to: increased strength, reduced permeability, greater durability and effective control of efflorescence and degradations caused by alkali-silica reaction (ASR) in concrete.

Description: A white, manufactured, amorphous alumino-silicate with excellent physical, chemical and pozzolanic properties. Conforms to ASTM C-618, Class N Specifications for Natural and Calcined Pozzolans.

Physical Properties:

Specific Gravity:	2.60	D10	<2.0um
Physical Form:	Powder	D50	<4.5um
Color:	Off-White	D90	<25um
GE Brightness:	79-82	Bulk Density (lbs/ft ³):	18-22
BET:	15M ² /gram	Bulk Density (g/cm ³):	.03-.04

Chemical Composition, Wt.:

SiO ₂	52-55%	CaO	<0.20%
Al ₂ O ₃	41-44%	MgO	<0.10%
Fe ₂ O ₃	<1.90%	Na ₂ O	<0.05%
TiO ₂	<3.0%	K ₂ O	<0.75%
SO ₄	<0.05%	L.O.I.	<0.50%
P ₂ O ₅	<0.2%		

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