

ACAS-300 Type GS Glass Pozzolans Technical Data

Description

ACAS-300 Type GS Glass Pozzolan is a powder product conforming to the ASTM C1866 Glass Pozzolan standard, which went into effect in early 2020. ACAS-300 Type GS glass is a fine powder with a fineness specification of minimum 95% passing a 325 mesh sieve. The Blaine fineness is 4,000-4,500 cm²/g. The glass is whiter than white cement and works well for decorative concretes. Made from recycled plate glass, ACAS-300 is 99.8% pure glass and has high reactivity, as measured by the strength activity index of 85% of control after 7 days and over 95% of control at 28 days when used at a 20% cement replacement level. X-ray diffraction confirms that the ACAS-300 Type GS Pozzolans are fully amorphous and contain no crystalline silica. ACAS-300 Type GS Glass Pozzolans are recommended for cement and concrete applications with limestone or dolomitic aggregates, where they can be used at 15-30% cement replacement depending on the mix design. Use with siliceous aggregates will normally require compliance testing by ASTM C1778 or AASHTO T-380.

Typical Chemical and Physical Properties

NOT FOR SPECIFICATION PURPOSES

Chemical Properties (%)			
Silica, SiO ₂	71.2	Sodium oxide, Na ₂ O	13.2
Alumina, Al ₂ O ₃	0.36	Potassium oxide, K ₂ O	0.04
Iron Oxide, Fe ₂ O ₃	0.44	Titania, TiO ₂	0.04
Calcium, CaO	9.33	Boron oxide, B ₂ O ₃	0.023
Magnesia, MgO	3.86	Loss on ignition, LOI, max	0.5

Physical Properties	ACAS	Test Procedure
Specific Gravity	2.5	ASTM D153
Bulk Density, lb/ft ³	60	ASTM C110
Passing No. 325 mesh, min %	95	Air-jet sieve
Pozzolanic Strength Index, % control	>75	ASTM C1866
Brightness, Y value	85-90	PhotoVolt 577PC
Hardness – Mohs	5.5	Moh's Scale
Free moisture, %	<0.5	ASTM C566

Product Information / Ordering / Customer Service

Phone: 678-729-9333 Fax: 678-750-0105

Email: technicalsales@vitrominerals.com

Standard Package: 50-lb. paper bags, 2,800 lbs./pallet, 40 x 48 pallet, shrinkwrapped. Product also available in bulk and supersacks up to 3,000 lbs.

FOB plants in Tennessee and Indiana.

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