



ACAS Type GS Glass Pozzolans Technical Data

Description

ACAS Type GS Glass Pozzolan is a powder product conforming to the ASTM C1866 Glass Pozzolan standard, which went into effect in early 2020. ACAS 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 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 Type GS Pozzolans are fully amorphous and contain no crystalline silica. ACAS 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 TP-110.

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
Calcia, 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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