



# **ACAS Glass Pozzolans**

# **Technical Data**

### **Description**

ACAS Glass Pozzolans are made from post-consumer bottle glass that is processed into a very clean off-white powder specially sized for maximum efficiency for use as a pozzolan in concrete. The glass is collected from MRFs or bottle drop-off centers and undergoes an engineered process, wherein contaminants and paper labels are removed, and the powder is produced with a minimum fineness of 90% passing a 325 mesh, corresponding to a Blaine fineness of 400 m²/kg. X-ray diffraction confirms that the ACAS Pozzolans are fully amorphous and contain no crystalline silica. ACAS 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 Composition:  $SiO_2$  70-80%;  $Na_2O+K_2O$  10-16%; CaO 9-13%;  $Al_2O_3$  1-5%;  $Fe_2O_3$  <1%; MgO <1%;  $SO_3$  <0.5%;  $TiO_2$  <0.1%; LOI <0.5%. These oxides are combined in an amorphous (non-crystalline) state in a silicate glass.

Physical Properties	ACAS	Test Procedure
Specific Gravity Bulk Density, lb/ft <sup>3</sup>	2.5 60	ASTM D153 ASTM C110
Passing No. 325 mesh, min %	90	Air-jet sieve
Pozzolanic Strength Index, % control	>75	ASTM C618
Brightness, Y value	75-80	PhotoVolt 577PC
Hardness – Mohs	5.5	Moh's Scale
Free moisture, %	<0.5	ASTM C566

#### **Product Information/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, Illinois and New York.

**Disclaimer:** The statements in this bulletin are based on data that is believed to be reliable, and is offered in good faith to be applied accordingly to the user's best judgment. Since operating conditions at customer's sites are beyond our control, Vitro Minerals will not assume responsibility for the accuracy of this data, or liability that may result from the use of its products. Likewise, no patent liability is assumed for use of Vitro Mineral products in any manner which could or would infringe on patent rights of others.

**Health Hazard Warning:** Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury. Avoid creating dust when handling, using or storing. Follow OSHA Safety and Health Standards for fugitive dust. The current Safety Data Sheet containing safety information is available and should be consulted before usage.

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