



# Wesolok Q

colloidal alumina  
for ceramic fiber bonding

## Why Wesolok Q?

Wesolok Q alumina binder is a high purity boehmite (alumina monohydrate) powder ready for dispersion in water at up to 20% concentration to give stable colloidal alumina sols for bonding and rigidizing refractory fiber shapes.

- **Withstands higher temperatures** - High purity alumina provides for low reactivity and can be used to replace colloidal silica where greater refractoriness at use temperatures is required.
- **No cristobalite** – Completely cristobalite free eliminating a common source of thermal shrinkage problems and health-related concerns.
- **Flocs with cationic starch** – Has a moderate cationic charge which works well with all starches, and especially well with a cationic starch like Westar+.

### Typical Properties

Appearance	White powder
pH (20% in water)	3.2
Loose Density	35 – 50 lbs/ft <sup>3</sup>
Al <sub>2</sub> O <sub>3</sub> , wt. %	80
Na, ppm	< 50
Surface Area, m <sup>2</sup> /g	200 – 300*
Crystallite size, Å	40 - 90
Bulk particle size, µm	100 - 130
Concentration limit, sol	20 wt%**
* After Activation (3 hours, 550°C)	
** Higher concentrations will gel	

## How to Use Wesolok Q for fiber bonding

Wesolok Q should be flocced with cationic corn starch, like Westar+. Start with a balanced ratio of 6% starch and 6% alumina based on weight of fiber, and adjust as needed.

### Typical Formulation:

		<u>with filler</u>
Water, Gallons	50	50
Refractory Fiber, lbs	8	8
Alumina filler, lbs	0	3
Westar+ Starch, lbs.	0.5	0.7
Wesolok Q, lbs	0.6	0.8

Follow above order adding Westar+ dry and mix for ten minutes to disperse and swell starch before adding Wesolok Q. Mix an additional 15 minutes to complete floccing before forming.

### Storage, Handling, Packaging, and Safety:

Wesolok Q must be stored dry and protected from moisture. Under these conditions Wesolok Q has an infinite shelf life.

Wesolok Q is available in fiber drums, 400 lbs net, loose. Cartons: 50 lbs. net.

Wesolok Q is non-toxic. Do not breathe dusts. Dispersions are mildly acidic. Protect eyes from splashes. See SDS for a complete safety discussion.

For a price quote and valuable information  
on how we can help you improve your  
vacuum formed products call

**WESBOND**  
**(302) 655-7917**