



# Wesol D30

colloidal alumina  
for rigidizing ceramic shapes

## Why Wesol D30?

- **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.
- **Easy to use** – Pre-dispersed colloidal alumina requires no mixing tanks or mixers.

### Typical Properties

Appearance	White liquid
pH	3.5 – 4.5
Specific Gravity	1.23
Concentration , wt. %	30
Na, ppm	< 20
Surface Area, m <sup>2</sup> /g	140*
Crystallite size, nm	18

\* After Activation (3 hours, 550°C)

Wesol D30 alumina binder is a 30 weight percent dispersion of colloidal alumina. It can be used instead of colloidal silica for rigidizing and hardening ceramic shapes, especially fiber shapes made by vacuum-forming. Fiber shapes bonded with Wesol D30 are more refractory and safer to use than shapes bonded with colloidal silica.

## How to Use Wesol D30 for Rigidizing

For surface hardening, edge retention, and dust reduction, Wesol D30 can be applied with a brush or roller, or a sprayer.

If rigidizing throughout the shape is desired, dip shapes or board in full strength Wesol D30 for 10 to 30 seconds to get desired pick-up and hardness.

Dry at 250°F (120°C). To set the rigidizer permanently, 750°F (400°C) is suggested as this will remove the water of hydration from the alumina binder.

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

Wesol D30 must be stored at room temperature to protect from freezing and over-heating. Wesol D30 is available in 1- and 5-gallon plastic pails; plastic 55-gallon drums (550 lbs net). Wesol D30 is non-toxic. 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**