



# Polymer QDA 2004

Latex additive  
for fiber vacuum forming

Polymer QDA 2004 is a latex for fiber vacuum forming. The polymer's unique physical properties result in higher green strength.

## QDA 2004 offers these advantages:

- Originally developed for the investment casting industry where it is used to enhance green strength, improve wax wetting and stucco adhesion, and to increase shell build thickness.
- QDA 2004 is a carboxylated styrene-butadiene copolymer latex, pH balanced to be compatible with colloidal silica.
- Improves green MOR of fiber shapes.

## How to Use QDA 2004

QDA 2004 should be added to the slurry at 5 - 10 weight percent of the dry colloidal silica.

### Typical Formulation:

Water, gallons	1000
Refractory fiber, lbs.	80
QDA 2004, lbs.	0.5
Westar +3 Cationic Starch, lbs	4
Levasil FO2040 Colloidal silica, lbs.	14

Follow above order of addition, adding QDA 2004 after the fibers have dispersed. Allow sufficient mixing time after QDA 2004 addition for complete dispersion before adding starch.

## Storage and Handling

Protect from freezing. Ideal storage temperature is 22°C (72°F). Stability at 22°C (72°F) is 180 days when properly stored.

## Typical Physical Properties

Color	White
Consistency	Thick Liquid
Bulk Density	1.0 g/ml (62 lb/cubic foot)
Nonvolatile content, %	44.0 – 47.0
pH	8.0 – 9.0
Viscosity, Brookfield, (cps)	175, max
Toxicity	Non Toxic. Mild skin irritant. Severe eye irritant. Protect eyes from splashes. See MSDS.
Packaging	1-gallon and 5-gallon pails. 55-gallon drums, 425 lbs. Net.