



Wesbond PS9400W

Wetting agent for rigidizing vacuum formed shapes

PS 9400W is a low-foaming rapid-wetting surface active agent (surfactant) for use in rigidizing vacuum-formed ceramic fiber shapes. It is effective at low concentrations and enhances rigidizer penetration.

PS9400W offers these advantages:

- PS9400W is a nonionic wetting agent so it enhances penetration without foaming.
- Chemically PS9400W is Isodecyl Alcohol Ethoxylate, a nonionic chemical compatible with colloidal silica and colloidal alumina.
- PS9400W will improve rigidizer penetration of dense, waxy or oily fiber shapes.

How to Use PS9400W

Wesbond PS9400W should be added to the rigidizer at 0.1% to 0.2% of the total weight of the rigidizer.

Typical Formulation:

	Volume	Weight
Levasil FO2040 colloidal silica	5 gallons	54 lbs
PS9400W wetting agent (0.1%)	25 ml	25 grams

Allow sufficient mixing time after PS9400W addition for complete dispersion before rigidizing.

Storage and Handling

Protect from freezing. Ideal storage temperature is 22°C (72°F). Stability at 22°C (72°F) is 2 years when properly stored.

Typical Physical Properties

Color	transparent
Consistency	Thick Liquid
Bulk Density	1.0 g/ml (62 lb/cubic foot)
Nonvolatile content, %	~ 90%
pH	8.0 – 9.0
Toxicity	Non Toxic. Mild skin irritant. Mild eye irritant. Protect eyes from splashes. See SDS.
Packaging	1-gallon and 5-gallon pails. 55-gallon drums, 425 lbs. Net.

Synthomer 29Y46 is used for the polymer modification of cementitious systems eg, repair mortars, flooring, render, floor screeds, bonding agents and tile adhesives. Cementitious mixes containing **Synthomer 29Y41** have the following advantages:

- * Increase adhesion to a wide range of substrates including concrete, glass, steel, etc.
- * Excellent resistant to water
- * Improved resistance to a wide range of chemicals
- * Thin section work is possible
- * Improved toughness, durability, abrasion resistance and crack resistance
- * Improved frost resistance
- * Reduced water to cement ratio for equivalent workability
- * Reduced surface dusting

The latex resists acid and alkaline hydrolysis and is free of any added plasticizers (hence no migration risk).

Product Description

QDA-2004 is a carboxylated styrene-butadiene copolymer latex, pH balanced to be compatible with colloidal silica slurries. QDA-2004 has significant adhesive properties and will add tackiness to shell coats for enhanced stucco adherence. QDA-2004 can be added directly to colloidal silica slurries to improve green strength and coating flexibility. The higher strength, more flexible coats can be force air dried to improve speed between coats.

Features

The addition of QDA-2004 to colloidal silica slurries results in:

- Better adhesion to the wax form.
- Greater strength in the green shell.
- Improves shell construction through better stucco adherence.
- Increased porosity in the fired shell.
- Decreased strength in the fired shell.
- Permits drying through more aggressive conditions
- QDA-2004 is more compatible with colloidal silica than most other latexes supplied to this industry. This greater compatibility results in longer slurry life.

Typical Properties

Polymer Type	Styrene-Butadiene
Nonvolatile content, wt%	51.0-53.0
pH	7.5 – 8.5
Viscosity, Brookfield, (cps)	500 max
Particle Charge.	Anionic
Specific Gravity	1.00 – 1.03 (8.34 – 8.60 lb/gal)
Average particle size, nm.	130

Storage

Although QDA-2004 exhibits stability to freezing and thawing in controlled laboratory tests, ideal storage temperature is 72°F (22°C). Stability at 72°F (22°C) is more than 350 days. If a cream has formed from long-term storage, it can easily be redispersed by agitation (if the cream has not hardened). The latex should be agitated before removing any quantity from the shipping vessel.

Packaging

Available in bulk shipments of 5,000 gallon tank trucks, 55 gallon drums (fiber), or 5 gallon pails.