

PRODUCT DESCRIPTION

η-Bond™ S400 is an advanced, plasticizer-free, anionic styrene-acrylate emulsion widely used for cement modification, flexible waterproofing membranes, and high-performance tile adhesives. Engineered with a balanced polymer structure, it imparts superior flexibility, cohesive strength and outstanding water barrier properties to complex mineral-binder matrices.

KEY BENEFITS

Superior Elasticity & Crack-Bridging: Imparts high elongation, allowing waterproofing membranes to withstand dynamic structural shifts.

Water Resistance: Exceptional resistance to long-term water immersion and chemical saponification.

Eco-Friendly Profile: Formulated free of plasticizers, organic solvents and alkylphenol ethoxylates (APEO).

Binder Compatibility: Extremely stable configuration prevents premature gelation or coagulation when mixing with Portland cement.

PHYSICAL PROPERTIES

Typical properties of the emulsions as supplied. These values do not constitute standard product specifications.

Property	η-Bond™ S400
Polymer Type	Styrene-Acrylate Emulsion
Solid Content (%)	55.0 - 57.0
pH Value @25°C	8.0 - 10.0
Viscosity (@25°C @100RPM, #62 SPINDLE)	500 - 1500 cps
Minimum Film Forming Temp (MFFT)	≈ <1°C
Tg (Glass Transition Temperature)	≈ -8°C
Specific Gravity (g/cm ³ at 25°C)	≈ 1.100
Appearance	Milky White Emulsion

APPLICATIONS

Two-component (2K) elastomeric cementitious waterproofing slurries for basements, roofs and wet rooms.

Highly flexible ceramic tile adhesives (C2 class) and tile grouts. Flexible fillers, crack sealers and anti-carbonation barrier coatings.

External Thermal Insulation Composite Systems (ETICS/EIFS) base coats

STORAGE AND SHELF LIFE

Storage Conditions: Must be kept in their original tightly sealed containers. Store in a cool, dry, well-ventilated indoor space shielded from direct sunlight and extreme climatic variations.

Temperature Control: Maintain storage temperatures strictly between 5°C and 40°C. **PROTECT FROM FREEZING.** Exposure to temperatures below 0°C will trigger irreversible polymer coagulation rendering the product unusable.

Shelf Life: Under pristine and unopened storage conditions, η-Bond™ S400 possess a standard shelf life of 12 months from the documented date of manufacture.

PACKAGING

To support varying industrial, distribution and construction project demands, emulsions are uniformly made available across global distribution lines in the following standard package formats:

Industrial Bulk Delivery: Road Tankers / Bulk ISO tank containers (for large-scale blending plants).

Intermediate Bulk Containers (IBC): 1,000 Liter heavy-duty composite tote tanks.

Standard Tight-Head Drums: 200 kg HDPE drums.

Pails & Canisters: 25 kg / 30 kg retail / contractor plastic pails (available through regional packaging lines).