



RayKote 444S Technical Bulletin

Styrene Acrylic Emulsion for Polymer Admix

RayKote 444S is a styrene acrylic emulsion designed for blending with cement for flexible concrete and crack resistant stucco. Specifically designed as a polymer modifier for cement, it exhibits excellent compressive strength and crack resistance. Its high alkalinity allows compatibility with “green” cement to yield flexible concrete patches and overlays.

Suggested Uses

- Concrete Admix
- Flexible stamped concrete

Key Features

- Superior compressive and flexural strength
- Excellent crack resistance
- Outstanding adhesion to old concrete and masonry surfaces

RayKote 444S Typical Physical Properties

| | |
|----------------------------------|----------------------------------|
| Polymer type | Styrene Acrylic emulsion polymer |
| Weight solids | 49 – 51% |
| Viscosity (Brookfield Model RVT) | 25 – 300 cps, #2/100 rpm |
| pH | 9.0 – 10.0 |
| Tg (MDSC) | 6°C |
| MFFT (ASTM D-235) | 3°C |
| Particle Size (Mean) | 0.22 microns |
| Surfactant Charge | Nonionic |
| Weight per Gallon | 8.61 lbs/gal |
| Bulking Value | 0.1161 gal/lb |
| Freeze Thaw Stability | Do Not Freeze |

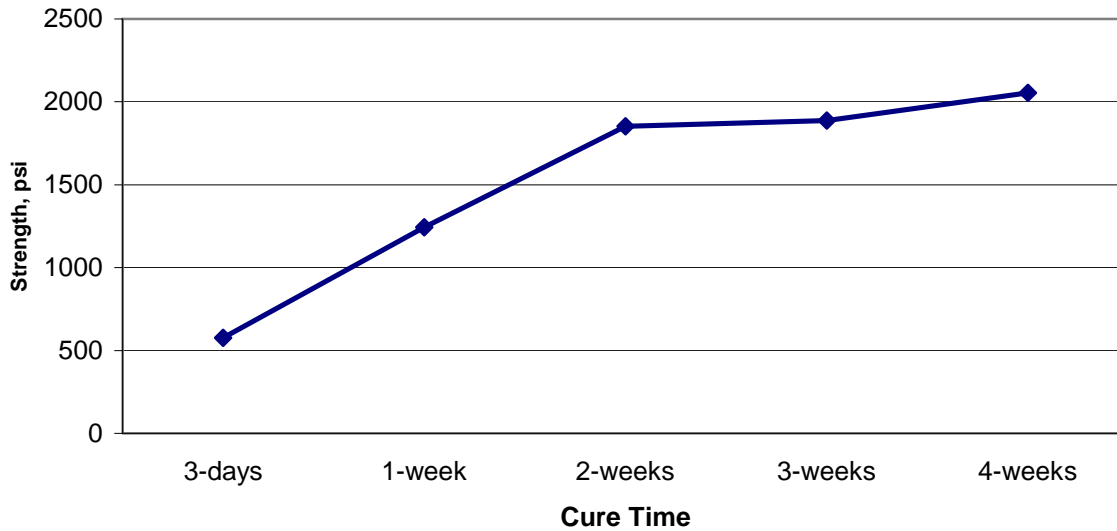
For 40 years, Specialty Polymers has been developing state of the art resins for the paint and coatings industry. With more than 250 products to choose from, Specialty Polymers has the right polymer to meet your needs.

Suggested Formulations
RayKote 444S – Polymer Cement Admix

| Ingredients | Weight (lbs) | Supplier |
|------------------------|---------------|---------------------------------|
| Portland Cement Type I | 100.00 | |
| Sand (20-30 mesh) | 300.00 | |
| RayKote 444S | 21.00 | Specialty Polymers, Inc. |
| Water | 15.00 | |
| Total | 436.00 | |

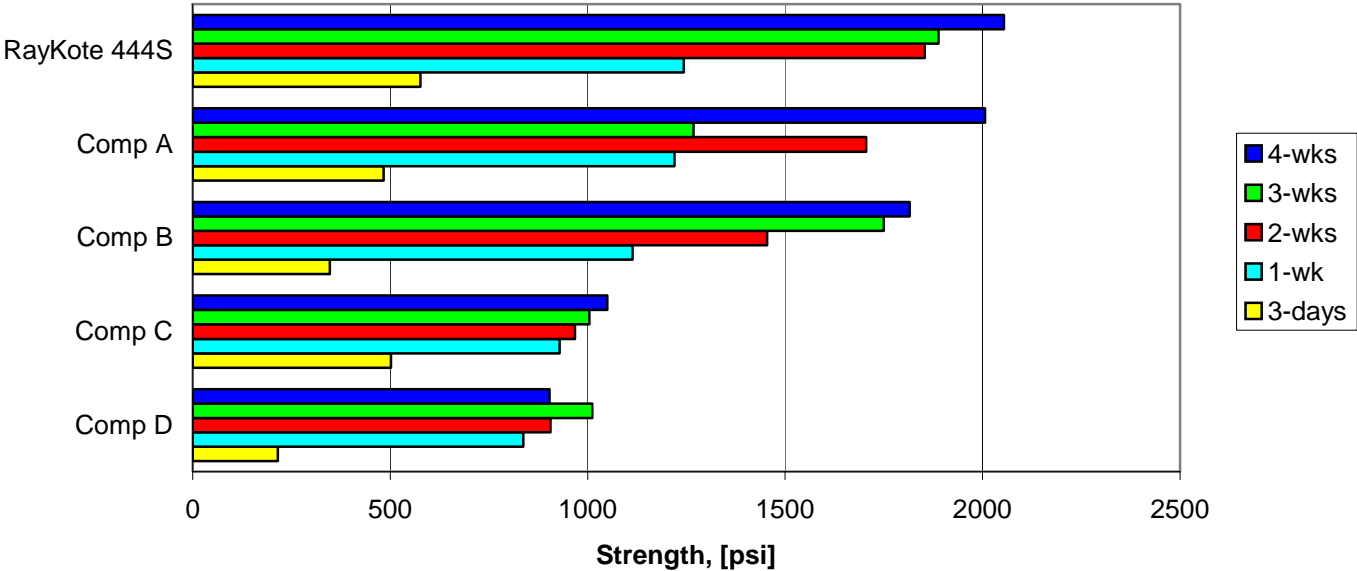
| Cure Time | Compressive strength ASTM C-579 [psi] |
|-----------|--|
| 3-days | 576 |
| 1-week | 1243 |
| 2-weeks | 1853 |
| 3-weeks | 1888 |
| 4-weeks | 2054 |

RayKote 444S
Compressive Strength ASTM C-579



RayKote 444S vs. Competitor Admix Polymers

Compressive Strength ASTM C-579



IMPORTANT INFORMATION

If any product is defective in workmanship or materials, Specialty Polymers, Inc. will replace the product. The information contained in this Technical Bulletin is intended to be a guideline. It is offered in good faith, but without guarantee. We recommend users of the product perform their own testing to determine the suitability of the product in their application.