

**POWERFUL POLYMERS
PAINLESS PROCEDURES
RAPID RESULTS**

Sealing Hairline Concrete Cracks with Acrylic Injection Resin

A concrete tank west of Rollinsville, Colorado began showing numerous, hairline cracks during construction. Previous attempts to seal the cracks using urethane grouts were unsuccessful due to the sheer tightness of the cracks and high amount of reinforcing steel. The tank was critical for a state infrastructure project, so Restruction Corporation was called in to get the job done.

POWERFUL POLYMER

After a phone consultation with an Alchemy-Spetec tech consultant, they determined the best course of action would be to use Spetec AG200, a super-thin acrylate grout that could penetrate the hairline cracks and even the ones previously injected with a urethane grout. This water-swelling hydrogel is based on low-viscous acrylic that cures into an elastic product with 500% elongation.



SUBSTANCE DATA OF COMPONENTS:

Component	Consistency Color Odor	Specific Density (68°F [20°C])	Dynamic Viscosity (68°F [20°C])
Comp. A1	liquid amber characteristic	approx. 71.79lbs/ft ³ (1.15 kg/dm ³)	approx. 20cps (0.02 Pa·s) ASTM D4878-98
Comp. A2	liquid colorless amine-like	approx. 69.92lbs/ft ³ (1.12 kg/dm ³)	approx. 280cps (0.28 Pa·s) ASTM D4878-98
Comp. B	solid white odorless	approx. 161.69lbs/ft ³ (2.59 kg/dm ³)	Bulk density (68°F) approx. 71.79lbs/ft ³ (1.15 kg/dm ³)

Viscosity at 68°F	Mix: AG200 + TEA + SP + H ₂ O =	5-7cps (0.005-0.007 Pa·s)
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MIXTURE OF A- AND B-COMPONENT:

Processing temperature*	41 - 104°F (5 - 40°C)	substrate temperature
Viscosity of mixture (68°F)	approx. 3-4cps (0.003-0.004Pa·s)	ASTM D4878-98

PAINLESS PROCEDURE

The tech consultant trained a knowledgeable polyurethane grout crew how to handle Spetec AG200 and an acrylic pump. No other chemical grout manufacturer was willing to come out and provide field service for this application.

RAPID RESULT

After the grout was injected, the cracks sealed quickly. Both the customer and contractor were extremely happy with the results. Yet another successful job for one of our customers!

About Alchemy-Spetec

The Leak Seal Division

The Alchemy-Spetec Leak Seal Product Line combines a full-system offering of polymer chemical grouts and equipment with perhaps the most experienced technical team in the industry. For any concrete leak seal application, lean on the Alchemy-Spetec team for phone, field, or engineering support. Our growing network of Regional Managers, Independent Representation, and Nationwide Distribution offers industry professionals many levels of opportunity worth discussing with our team. Consultants at Alchemy-Spetec pride themselves on rapid, powerful, and painless scheduling of field and technical support. We invite you to inquire about our bi-annual factory training held at the Tucker, GA-based manufacturing facility where they can learn from the 20+ year average industry experience of our Regional Management and Technical Team.

The Geotech Division

The Alchemy-Spetec Geotech Product Line offers industry-leading quality, full chemical grout lifting rig training and support, and unmatched contractor support in the field and with sales and marketing. Contact us today to learn about the tangible benefits of joining the Alchemy-Spetec network of geotech contractors. The Alchemy-Spetec MixMaster Pro Gun is a maintenance and production cost-saver for any lifting contractor, while the flagship lifting foams have helped many contractors reduce volume usage while eliminating call-backs. From the Polybadger machine that fits into a pickup truck, to custom boxtruck and trailer rig buildouts, Alchemy-Spetec is widely considered the premier geotechnical chemical grout & equipment supplier. With the additions of ground penetrating radar and penetrometer equipment and support, Alchemy-Spetec is truly on the cutting-edge of the chemical grouting industry.