

**POWERFUL POLYMERS
PAINLESS PROCEDURES
RAPID RESULTS**

Contractor Seals Leaks in Quenching Tanks for Aluminum Manufacturer

A large Mid-Western aluminum manufacturer was losing water from all of its quenching tanks. Losing 3 million gallons in half a year can be expensive, not to mention the massive effect that volume of water can have on soil and the structures it supports. So, they reached out to one of their trusted maintenance contractors, who in turn came to Alchemy-Spetec for guidance on how to efficiently mitigate the leaks with minimal downtime.



POWERFUL POLYMER

After consulting with Alchemy-Spetec, the contractor injected Spetec PUR F400 to seal the leaking cracks. This material is a solvent and phthalate-free, water-reactive, hydrophobic, closed-cell, low viscosity, shrink-free, flexible, one-component polyurethane injection resin designed to shut off water leaks.

Physical Properties - Uncured - (appearance white liquid)

SPETEC PUR F400		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	±340cps (±0.34 Pa·s)
Flash Point	(ASTM D1310-86)	>302°F (>150°C)
Density	(ASTM D3505-96 [2000])	1.067 ± 0.005 oz/ft ³ (1.068 ± 5.006 g/m ³)

Physical Properties - Cured

SPETEC PUR F400		
Tensile Strength	(ASTM D3574-03)	290psi (20 bar)
Elongation at break	-	±100%

Properties will vary depending on application conditions.

PAINLESS PROCEDURE

Concrete crack injection with polyurethane resin is a five-step process:

1. Drill the injection holes.
2. Flush debris out of the holes with water.
3. Install the injection port.
4. Flush the crack with water.
5. Inject the resin.

RAPID RESULT

The crew repaired leaks in one tank at a time with no manufacturing delays. This meant no production interruption. The work was done at a fraction of the cost of replacing the tanks.

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.