

This table provides general chemical resistance guidance for the **Pecora DynaThane 800MM Machine Mix Polyurethane/Polyurea Hybrid Joint Filler** used in concrete control joints. Ratings assume ambient-temperature splash/spill exposure rather than continuous immersion. Use for preliminary screening only.

Chemical / Class	Typical Concentration / Exposure	Expected Performance	Comments / Notes
Water (fresh, salt, de-ionized)	Any, up to 140°F (60°C)	✓ Excellent	Stable, minimal swelling.
Brine / Sodium Chloride	5–10 %	✓ Excellent	Common in warehouse & freezer floors.
Diesel, Kerosene, Jet A	Splash/spill	✓ Excellent	No visible change.
Gasoline (with ethanol or MTBE)	Splash/spill	✓ Good–Excellent	Minor surface softening possible.
Motor / Hydraulic Oils	Prolonged contact	✓ Excellent	Widely used in maintenance bays.
Glycols / Antifreeze	30–50 %	✓ Excellent	Stable at ambient temps.
Mild Acids (acetic ≤ 10 %, citric ≤ 5 %, H ₂ SO ₄ ≤ 10 %)	Splash/spill	✓ Good	Slight dulling with prolonged contact.
Mild Alkalis (NaOH ≤ 5 %, NH ₄ OH ≤ 5 %)	Splash/spill	✓ Good	Short-term exposure acceptable.
Strong Acids (HCl > 10 %, H ₂ SO ₄ > 20 %, HNO ₃ > 5 %)	Any	⚠ Poor	Rapid softening/discoloration; not recommended.
Strong Alkalis (NaOH > 10 %, KOH > 10 %)	Any	⚠ Poor	Hydrolyzes urethane linkages over time.
Solvents – Alcohols (ethanol, isopropanol)	Splash/spill	⚠ Fair	Temporary swelling possible.
Solvents – Ketones (MEK, acetone)	Any	✗ Not resistant	Rapid attack; avoid.
Solvents – Aromatics (toluene, xylene)	Any	✗ Not resistant	Severe swelling/softening.
Solvents – Chlorinated (methylene chloride, perchloroethylene)	Any	✗ Not resistant	Rapid degradation.
Vegetable / Animal Oils	Splash/spill	✓ Excellent	Good resistance.
Detergent & mild cleaning solutions	Dilute (< 2 %)	✓ Excellent	Suitable for washdowns.
Oxidizers (bleach > 5 %, peroxides)	Any	⚠ Poor	Surface chalking or embrittlement likely.
Fertilizer solutions (urea, ammonium nitrate)	Dilute	✓ Good	Stable under typical exposure.

✓ = Good to Excellent ⚠ = Limited / Fair ✗ = Not Recommended

Temperature greatly affects resistance: ratings assume ≤ 40 °C.

For critical exposure, test per ASTM D543 or ASTM C1247.

TECHNICAL SERVICES

Pecora technical representatives are available to assist you in selecting an appropriate product and to provide application instructions. For further information and assistance, please call our Technical Service department at 215-723-6051 or 800-523-6688.