Resilon® Polyurethane 4350

With High Temperature Nanotechnology

Extended seal life means more design freedom

Parker's Resilon Polyurethane is the industry benchmark in high performance hydraulic sealing systems. Always striving for improvements, our material scientists have achieved a breakthrough in high temperature sealing performance. The new Resilon 4350 increases the high temperature operating window for seals from 230°F to 250°F for continuous use in many applications and can withstand brief excursions up to 300°F without leakage.

Now seal designers have a new solution as they push the envelope in temperature extremes.

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Product Features:

- 30% more sealing force at 250 °F / 121 °C operating temperature
- Withstands excursions up to 300 °F / 149 °C
- Equivalent performance to Resilon 4300 in:
  - Wear Resistance
  - Chemical Resistance
  - Physical Properties
- Offered in Parker ♦Preferred♦ Profiles for Fluid Power Seals or custom designed profiles
- Seals can be produced by both molded and machined manufacturing processes

LEARN MORE ABOUT RESILON MATERIALS

ENGINEERING YOUR SUCCESS.

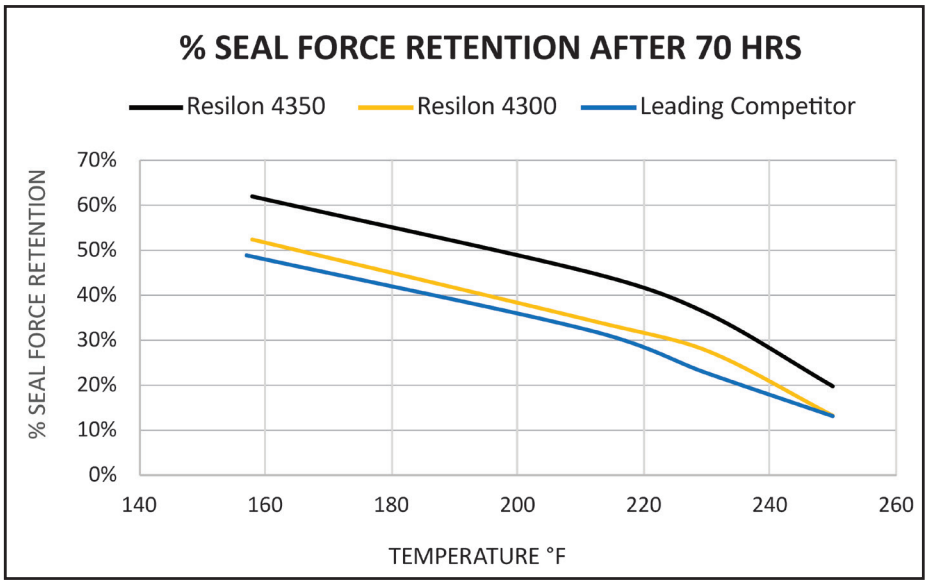
The Future of High Temperature Sealing

Resilon® Polyurethane 4350 has more sealing force to withstand higher temperatures without failing

Peace of Mind

The ability of a seal to function over time depends in part on how much sealing force the sealing material can retain. Comparison testing in Parker's lab shows that over the temperature range of most high performance hydraulic applications, Resilon 4350 maintains significantly higher sealing force. This means that for a given temperature, seals made from Resilon 4350 will last longer.

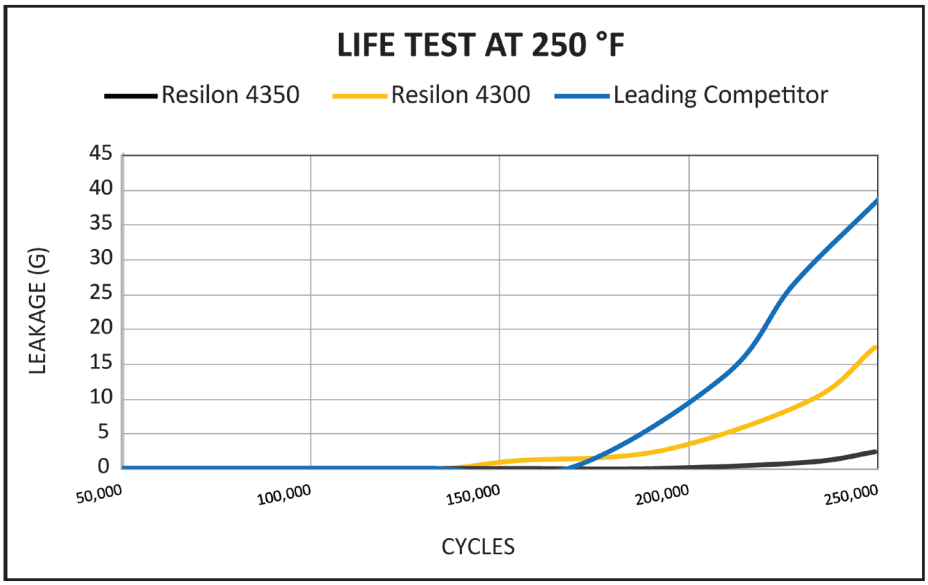
Whether you want to increase the time between maintenance cycles or increase your operating temperatures without compromising up time, consider Resilon 4350.



Seal Life

Maintaining up time is critical to any hydraulic system. In a head to head comparison at a constant 250°F, Resilon 4350 lasted 33% longer than Resilon 4300 and 20% longer than the leading competitor before a leak was detected. More importantly, Resilon 4350's ability to retain sealing force minimized leaking as the test continued compared to the leading competitor which failed catastrophically.

Whether your challenge is short term, high temperature exposure or longer seal life, Resilon 4350 can help you achieve your goals..



Polyurethanes are a thermoplastic elastomer. High heat causes the material to soften. Resilon 4350 seal (black) and Leading Competitor seal (blue)

Performance and Reliability

Resilon Polyurethane is the best performing seal material on the market for high performance hydraulic systems. Add to that Parker's unique seal geometries and your sealing system will perform under a wide range of temperatures, pressures and fluids.

Resilon 4350 is now available when you need a boost in high temperature performance or want to improve the longevity of your current sealing system.

Resilon® Material Properties

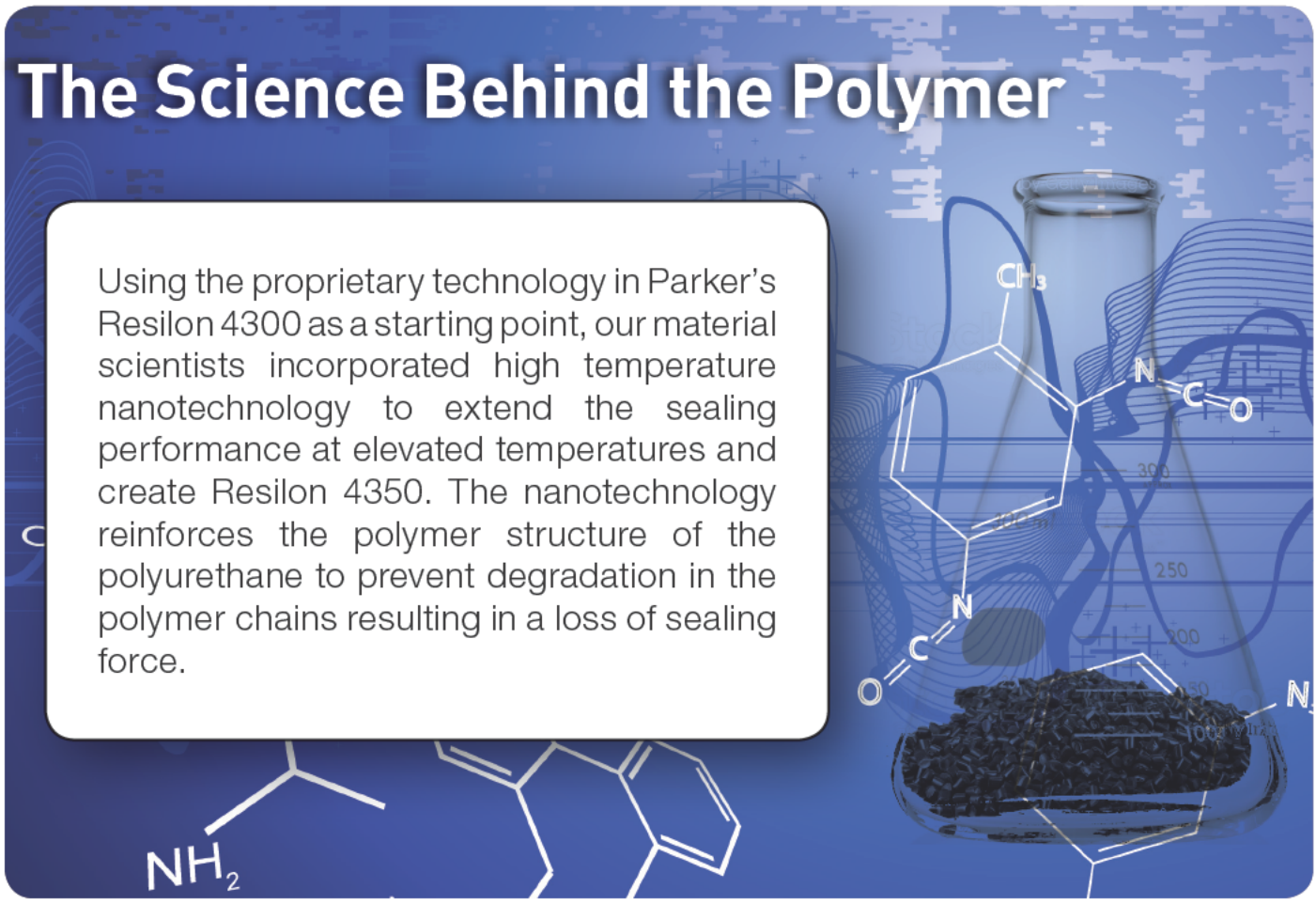
Parker's Resilon Polyurethane is a patented thermoplastic urethane (TPU) specifically suited for injection molding manufacturing processes. It has superior dynamic properties, excellent flex resistance and good cut and tear resistance.

Resilon comes in a variety of formulations for specific application conditions. Resilon 4350 retains the superior physical properties on which you've depended but is targeted for applications where prolonged high temperatures or excursions to very hot conditions exist.

Contact Us
Contact Parker's application engineers via phone, 800 233 3900, or e-mail, eps-ccare@parker.com, to learn more about Resilon 4350 and to discuss your sealing challenges.

Resilon® Physical Properties

	4350A90	4300A90
Hardness, Shore A, pts	90	90
Modulus @ 100%, psi (MPa)	1870 (12.9)	1674 (11.5)
Ultimate Tensile Strength, psi (MPa)	8340 (57.5)	8021 (55.3)
Elongation, %	570	638
Specific Gravity	1.18	1.17
Rebound, %	62	61
Compression Set, %, 70 hrs @ 212°F	26.3	30.9
Tg, DSC, °C	-44.1	-41.6



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