ZP205-90

Faster Degradation at Lower Temperatures in Downhole Completions

Parker's ZP205 degradable elastomer compound continues to push technological advancements in the downhole completions market segment with faster degradation rates in lower wellbore temperatures. As the hydraulic fracturing market continues to develop, there is a need for degradable technologies to function at lower temperatures of 140°F, or below. The ZP205 is designed to degrade approximately 50% quicker than legacy ZP204 when exposed to temperatures of 140°F, or below, while maintaining necessary physical properties to ensure reliability in high pressure hydraulic fracturing applications. Once hydraulic frac is complete, the unique compound degradation is activated by water based frac fluids to allow breakdown into flowable, non-clogging particulates, providing multiple benefits to the end user. Degradation can be on the scale of days to weeks, depending upon the temperature profile of wellbore, but is not greatly affected by a wide range of salinities.

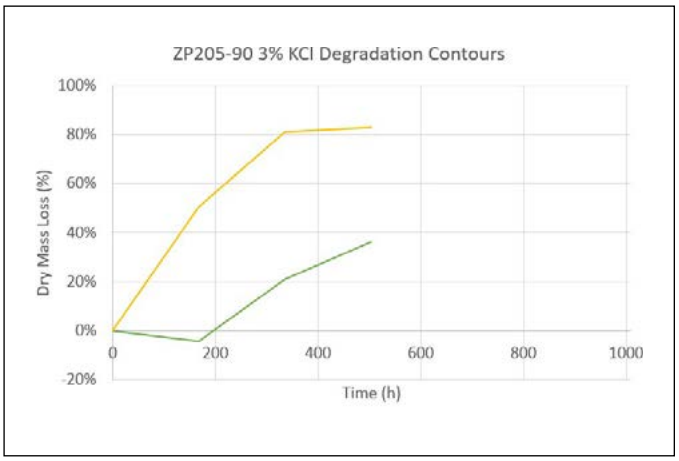
Degradable elastomers come in various sealing solutions. Above image is of degradable packing elements.

Parker's ZP205 is formulated for an ideal working temperature range of 120°F to 160°F but can be used outside of these if a wider range of degradation time is acceptable. The removal of drill out step that is required for composite plugs reduces cost of operation, increases rate of return getting well to production, reduces carbon emissions, and results in overall increased safety with personnel on the surface wellsite.

Contact us for information or custom assistance with your hydraulic frac application needs at 859-335-5101 or chat with us online at www.parker.com/oes.

ZP205-90 Material Data

Original Physical Properties Air (Dumbbells)	Test Method	Test Result
Hardness, Shore A, pts.	ASTM D2240-15	88
Tensile Strength, psi	ASTM D412-16, Die C	2,744
Elongation, %	ASTM D1412-16, Die C	176
50% Modulus, psi	ASTM D412-16, Die C	1,102
100% Modulus, psi	ASTM D412-16 Die C	1,874
Specific Gravity	ASTM D297	1.41



Product Features

- 90 Shore A Hardness
- 10ksi pressure capability
- Ideal Temperature Range of 120°F to 160°F
- Elastomeric Resilience
- Water Activated Degradation
- Tolerant to a wide range of Salinities
- Reduces to Non-Clogging Particulates
- Available in Packing Elements, O-rings, Custom Shapes and Bonded Profiles

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