

Delayed-Activation Systems

Enzyme activity, released on demand.

At Epygen Labs, our R&D team has been asking a simple question: how do we make our enzymatic breaker technology work *on demand*, precisely when the well needs it?

The answer is our new generation of **delayed - activation systems for Petrolize®**.



THE SCIENCE OF WHAT IS NEXT

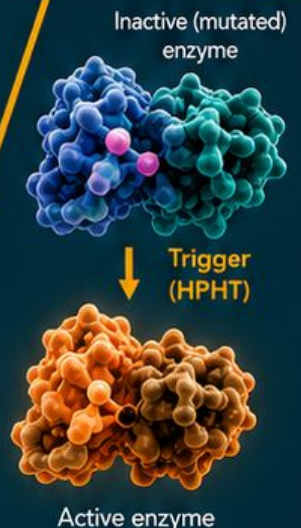
Great science isn't just about what a product does today, it's about the potential still waiting to be unlocked.



Ali Hafiz

ENZYME INNOVATION

Thermal energy rearranges protein "Cap Domain" and locks subunits into a stronger ensemble. The Serine and Histidine Lid is triggered open by HPHT, allowing access to the catalytic core

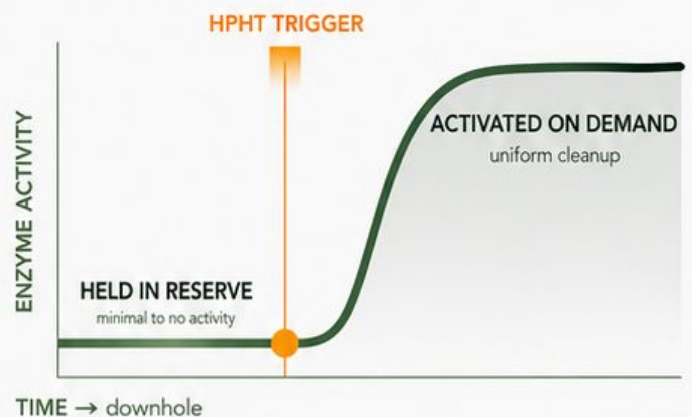


Every field is different. Every operator has different requirements – temperature windows, brine chemistry, reaction timing. A one-size-fits-all breaker doesn't cut it. So we engineered Petrolize® to hold its activity in reserve and release it exactly when and where it's needed, giving operators control over filter-cake cleanup like never before.

Under high-pressure, high-temperature conditions, this means:

- ✓ Controlled, predictable reaction timing
- ✓ Uniform cleanup across the reservoir section
- ✓ Tailored performance for each client's unique downhole environment

This is the exciting part of what we do – taking a proven product and unlocking capabilities that redefine what's possible in enzymatic filter-cake removal.



Petrolize®

Enzymatic filter-cake breakers —
engineered for control

