D-STROYER* additive is an internal filter-cake breaker for use in polymer-base reservoir drilling and completion fluids and lost-circulation pills used during completion or workover operations.

D-STROYER additive is initially deposited as an inert particle within the filter cake. When activated by lower pH fluids, it greatly increases the degradation rate of the filter cake, thereby aiding in cleanup.

**Typical Physical Properties**
- Physical appearance: Yellow-to-white powder
- Bulk density: 37.5 - 50.0 lb/ft³
- Solubility: Insoluble in water

**Applications**
D-STROYER additive aids in filter-cake cleanup when used in polymer-base reservoir drilling and completion fluids and in lost-circulation pills during completion and workover operations. D-STROYER additive is added at the surface to the selected system and is subsequently deposited as an inert particle in the filter cake. During the completion/cleanup phase, a mild acidic solution activates the D-STROYER additive, resulting in a more thorough destruction of the filter cake. During activation, the D-STROYER product is released slowly. It oxidizes polymers and other organic components (i.e., lubricants, especially ester-base). This process enhances cleanup efficiency of the residual filter cake.

Treatment levels are normally 0.5 to 2.0 lb/bbl (1.5-6 kg/m³) for reservoir drilling fluid applications and 3.0 to 4.0 lb/bbl (9-12 kg/m³) for lost-circulation pill applications. Bottomhole temperature can impact the required concentration and activation rate. Applications for relatively elevated bottomhole temperatures >190°F (88°C) should be pilot tested.

**Advantages**
- When compared to an acid soak (i.e., HCl), the addition of D-STROYER additive has exhibited a 60% reduction in the time required to degrade a residual filter cake in a low-temperature environment <150°F (65°C)
- Can be used in any polymer-base drilling fluid with a pH ≥9, especially FloPro® NT and DiPro® systems
- Most effective at temperatures < 190°F (88°C)
- Weak or organic acids, such as D-Solver®, D-Solver Plus, acetic acid, etc., can activate the decomposition process
- Naturally produced low pH fluids such as carbonic acid can activate the decomposition process
- D-STROYER additive aids in destroying xanthan and ester-base lubricant components in the filter cake

**Limitations**
- Exposure of this dry material to the atmosphere reduces the activity level of the product
- Do not add to fluids with a pH below neutral
- Temperatures above 190°F (88°C) limit the allowable exposure time

**Toxicity and Handling**
Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).
Packaging and Storage
D-Stroyer additive is available in 40-lb (18.2 kg) drums.

Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.