SAFE-BREAK MP additive is an internal filter-cake breaker used in polymer-base reservoir drilling and completion fluids and lost circulation pills during a workover or completion operation.

SAFE-BREAK MP breaker is initially deposited as an inert particle within the filter cake; however, when activated by lower pH, it greatly increases the degradation rate of the filter cake.

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

**Applications**
SAFE-BREAK MP breaker aids in filter-cake destruction when used in polymer-base reservoir drilling and completion fluids and in lost circulation pills during workover and completion operations. SAFE-BREAK MP breaker is deposited as an inert particle in the filter cake. During the completion/breaker phase, a mild acidic solution activates the SAFE-BREAK MP breaker, resulting in a more improved digestion of the filter cake. This process increases overall filter-cake destruction efficiency. Treatment levels are normally 0.5 to 1.0 lb/bbl for reservoir drilling fluid applications and 3.0 to 4.0 lb/bbl for lost-circulation pill applications.
Advantages

- When compared to a plain acid soak, SAFE-BREAK MP breaker reduces the time required for filter-cake removal by as much as 60%
- Can be used in any polymer-base drilling fluid with pH > 9
- Most effective at temperatures < 180°F
- Weak acid, such as 1% HCl, can activate the decomposition process

Limitations

- Exposure of dry material to the atmosphere reduces the activity level of the product
- Do not apply in base brines with a pH below neutral

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

SAFE-BREAK MP breaker is packaged in 100 lb (45.4 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.

No claim of personal safety is intended nor implied by the use of the name SAFE in this product. Personnel handling this material should read and follow all safety and handling procedures set forth on the Material Safety Data Sheet.