



# TETRA Break LTC

## POLYMER BREAKER

### Overview

TETRA Break LTC is an encapsulated oxidizing agent used to 'break' polymer residues within water-based drilling fluid filter cakes. TETRA Break LTC polymer breaker will oxidize commonly used viscosifiers and starch-based fluid loss additives. Although TETRA Break LTC polymer breaker will not dissolve weighting agent particles, the destruction of polymers within a filter cake is normally sufficient to compromise filter cake integrity and allow it to be flowed back to the surface.

### Features and Benefits

- Effective at low concentrations and is suitable for use with most standard water-based drilling fluid formulations
- Destabilizes filter cakes
- Is a dry powdered product and poses lower handling risks than liquid oxidizers
- Offers slower reaction rates than conventional oxidizing breaker systems, and may be used as an internal breaker

### Physical Properties

Appearance	White, granular powder
Specific gravity	0.90 - 1.0
Water Solubility	Soluble

### Packaging Information

5 lb pails

### Recommended Treatment

The typical recommended treatment concentration is 0.01 to 0.5% by weight. Consult a TETRA representative to discuss specific applications.

### Applicable Information

Removal of filter cake from open-hole reservoir sections is recommended for producers, and is considered essential for injector wells. Various treatments are available to dissolve calcium carbonate weighting agents within reservoir drilling fluid filter cakes. However, when it is not possible, or desirable, to use calcium carbonate as a weighting or bridging agent, then conventional breaker treatments based on acids or chelating agents will be ineffective. TETRA Break LTC polymer breaker is highly effective in these situations. TETRA Break LTC polymer breaker oxidizes the polymer chains that bind the weighting agent particles together, and, hence, reduces the integrity of the filter cake, allowing it to be flowed back through gravel pack screens to surface.

TETRA Break LTC polymer breaker can be used as an internal breaker in polymer-based fluid loss pills. The thermal stability of the pill and the time required for the gel to break are dependent upon the bottomhole temperature and the type and concentration of polymer(s) present in the fluid loss pill. Accurate contact times should always be established by laboratory testing under reservoir conditions.

### Safety and Handling

TETRA Break LTC polymer breaker is a severe irritant to eyes, skin, nose and throat. Avoid skin and eye contact, inhalation or ingestion. For skin contact, wash with soap and large quantities of water. For eye contact, flush with large quantities of water. Use properly designed respirator if adequate ventilation is not available. Refer to the Safety Data Sheet for specific details. TETRA Break LTC polymer breaker is a strong oxidizing agent and incompatible with strong acids, reducing agents, organic products, aluminum and copper.

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