

D-STRUCTOR HD

Organic acid precursor

APPLICATIONS

- High-density breaker operations requiring pure zinc bromide brine or a blend of zinc bromide and calcium bromide brine

ADVANTAGES

- Slow-acting breaker that spends as it is generated
- High-density (>14.0 lbm/galUS; 1.68 sg)
- Lower corrosivity than conventional acids
- Thorough, uniform removal of reservoir drill-in fluid filtercakes
- Safe breaker placement during completions operations

LIMITATIONS

Compatible only with zinc bromide brine and blends of zinc bromide and calcium bromide brines. Hydrolysis accelerates above 250 degF [121 degC], reducing the delay time needed for safe breaker placement.

The D-STRUCTOR HD* organic acid precursor is designed for high-density breaker applications that require zinc bromide as base brine. It converts to organic acid given temperature, time, and free water.

The primary function of the precursor is to slowly release organic acid through hydrolysis, which helps to minimize losses during breaker placement and achieve uniform filtercake removal across the open hole. Due to its slow-acting nature, the breaker system can be spotted and the workstring can be extracted from the openhole section without losing fluid into the formation. If a fluid loss control device is present, the breaker system can soak for an extended period, enabling a thorough and uniform filtercake removal while maintaining completion hardware integrity.

The D-STRUCTOR HD precursor can be used for applications requiring either pure zinc bromide brine or a blend of zinc bromide and calcium bromide brine. It is used at concentrations of at least 20% by volume for optimal filtercake removal. At temperatures above 200 degF [93 degC], an organic acid corrosion inhibitor should be included.

Toxicity and handling

Bioassay information is available upon request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the SDS.

Packaging and storage

The D-STRUCTOR HD precursor is packaged in 55-galUS [208-L] drums and cubic-meter totes. Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks, and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, or stacking.

Typical Physical Properties

Physical appearance	Liquid
Color	Colorless
Specific gravity	1.16 sg