



**HYBRID CHEMICAL  
TECHNOLOGIES**

# ENZYME BREAKER

## HEB-1

HEB-1 contains hemicellulase breaker concentrate and a propylene glycol freeze point depressant. Liquid enzyme breakers eliminate premix times and the dusting normally associated with powdered breakers. They can be run continuously and adjusted for concentration while pumping

## TREATMENT

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HEB-1 is generally used at a loading of 0.5 to 2.0 L/m<sup>3</sup>, depending on BHT and gel strength. Use HEB-1 in the pH range of 2-8 and for temperatures up to 70 °C.

## OPERATIONAL BENEFITS

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- Easily metered into solution.
- Can be added continuously on the fly or batch mixed.
- Locally manufactured in Alberta.
- Breaks HEC, Guar, and derivatized guar gels.
- Easily ramped up and down during pumping stages.
- Compatible with most fracturing and drilling additives.

## PROPERTIES

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<b>Appearance</b>	Colorless Liquid
<b>Odor</b>	None
<b>Specific Gravity</b>	1.02
<b>Solubility</b>	Soluble in Water