WBK-134
Encapsulated Breaker

WBK-134 is an encapsulated oxidizing breaker used to break guar or guar-derivative linear, cross-linked, or foamed fracturing fluids for moderate-temperature fracturing

Application

WBK-134 slowly releases into the fluid without seriously degrading fluid properties. The slow-release characteristic of WBK-134 allows delay of the break of the fracturing fluid. Higher breaker concentrations can be added to the fracturing fluid without compromising fluid rheology.

WBK-134 is a solid; therefore, the breaker will not be lost to the formation during fluid leak-off. The combined advantages of higher breaker concentrations and not losing breaker to the formation allow improved fracture conductivity to be attained using WBK-134.

Usage

WBK-134 is designed for reservoirs with bottomhole temperatures of 80° to 160°F (27° to 71°C). Breaker loadings can be tailored to the application, depending on break times required. When break times of less than 2 hr are required, consider using a non-delayed breaker.

Physical Properties

Appearance	Orange granules
Odor	Faint organic
Specific gravity	1.81
Particle size	10/50 mesh
Bulk density (lb/ft^3)	58 to 69
Solubility in water	Partially soluble

Advantages

- Increased break times can be obtained.
- Higher concentrations can be used without compromising fluid viscosity during proppant placement.
- Solid breaker will concentrate in the proppant pack during fluid leak-off.
- Conductivity of the created fracture can be increased by cleanup of proppant pack and breaking of filter cakes from linear of borate cross-linked fluids.

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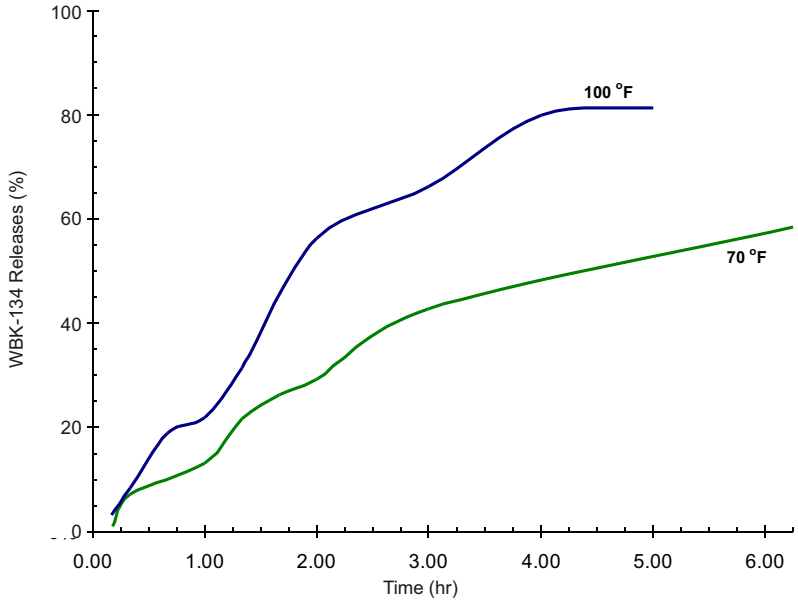
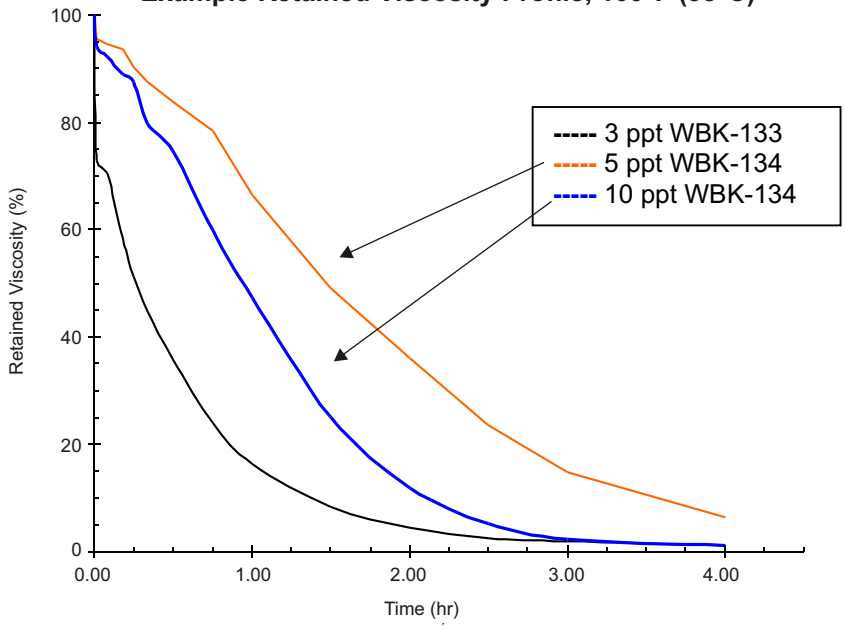
WBK-134 Release Profiles 70°F and 100°F (21°C and 38°C)



Example Retained Viscosity Profile, 100°F (38°C)



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