	HEC L Viscosifier	
Product Description	HEC L is a suspension of high-quality hydroxyl ethyl cellulose (HEC) polymer in an environmentally acceptable synthetic carrier.	
	HEC L is a modified high-molecular-weight, nonionic natural polymer specially suited for increasing the viscosity of brines. This easily breakable, non fermenting polymer will increase viscosity and carrying capacity of work over and completion fluids and heavy brines. It is not adversely affected by polar compounds, cement, or divalent cations such as calcium and magnesium. The low toxicity synthetic carrier assists in dispersion and helps prevent lumps or fisheyes, allowing the polymer to viscosify rapidly and smoothly without the need for high shear.	
Typical Physical Properties	Physical appearance	Tan Opaque liquid
	Specific gravity	1.06
	Solubility in water	Dispersible
	Flash Point	165°F (73.9°C)
Application	HEC L liquid viscosifier is designed to viscosify single-salt CaCl2 and CaBr2 brines and all monovalent-salt brines such as NaCl, NaBr, KCl, KBr, and NH4Cl.	
	It also can be used to provide viscosity for pills or spacers, fluid loss control, hole cleaning while washing, milling or reaming, gravel-pack fluids, and non damaging drill-in fluids.	
	The amount of HEC L viscosifier required to obtain a specific brine viscosity depends on the composition and density of the brine.	
		displacement spacers and fluids for drilling, milling, avel-packing operations, may require higher
Advantages	Readily breakable polymer for non damaging applications	
	 High concentration of polymer for improved handling 	
	 Viscosity development without high shear 	
	• Faster yield than dry polymers	
	Minimized tendency to form fisheyes	
	• Stability at temperatures up to 107 deg C [225 deg F]	
	Environmentally acceptable synthetic carrier	
	•Easy use compared with dry HEC	
	• Ready dispersement in most brine systems.	
Recommended Treatment	Treatments usually range be completion fluid.	tween 14.3 to 28.6 L/m3 [0.6 to 1.2 gal US/bbl] of

Important Note: These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our product are beyond our control. We recommend that the prospective user determine the suitability of our material and suggestions before adopting them on a commercial scale.

HEC L

Viscosifier

Toxicity and Handling

Packaging and Storage

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

HEC L is packaged in 5-gal (18.9-L) cans and 55-gal (208-L) drums. Store in a dry location away from sources of heat or ignition, and minimize dust.

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