

PURESTIM™ GELLED FRACTURING FLUID SYSTEMS

Achieve optimum viscosity and proppant suspension in any well conditions.

The PureStim family of fluid systems provides exceptional performance for a wide range of water qualities, bottomhole temperatures and stimulation applications. Using guar and cellulose derivatives, these systems are designed to achieve the desired viscosity to maintain maximum proppant suspension. Crosslinked versions can be tailored for specific temperatures and pumping times, regardless of water salinity. PureStim systems can be formulated with either dry or slurried gelling agents.

PureStim Linear

- Offers rapid hydration for applications that require low viscosity.
- Is able to attain the desired viscosity in waters with high salinity range.

PureStim B

- Uses a guar/borate formulation to crosslink in high pH ranges.
- Ideal for energized stimulations using nitrogen as the gas phase.
- Can be tuned for any range of desired crosslink times by choosing a delayed or instant crosslinker package.
- Addition of gel stabilizers mitigates temperature degradation effects in downhole conditions up to 300°F.
- Can be tuned for use with fresh to medium-salinity produced water [total dissolved solids (TDS) up to 80K mg/L].

PureStim Z

- Uses a zirconate crosslinker to perform in temperatures up to 375°F when combined with a guar derivative [carboxymethyl hydroxypropyl guar (CMHPG)] in high-pH environments.
- Delivers strong performance in low pH ranges, in any recycled/produced-water environment – including patent-pending method of using a CMHPG or guar gelling agent to handle TDS up to 300,000 mg/L.
- Achieves exceptional results using carbon dioxide for energized stimulations in low-pH environments.
- Can be combined with a carboxymethyl cellulose (CMC) derivative for applications that require the cleanest crosslinked systems.
- Can be tuned for any desired crosslink time by using either a delayed or an instant crosslinker package.

Breaker Packages

NexTier offers a large selection of superior breaker technology to meet every stimulation-design requirement.

- Persulfate salts
- Bromate salts
- Chlorite salts
- Organic enzymes
- Catalysts for low-temperature applications

PureStim Selection Guide: Total Dissolved Solids/Gelling Agent/Temperature ¹								
	Complex Brine						Gelling Agent	Max Temp
	TDS (mg/L)							
	< 50K		50K to 150K		150K to 250K			
	Multivalent Species (mg/L)							
	< 1K	1K to 5K	< 5K	5K to 10K	< 10K	> 10K		
PureStim Linear	✓	✓	✓				Guar	300°F
	✓	✓	✓	✓	✓	✓	CMHPG	375°F
	✓						CMC	260°F
PureStim B	✓	✓	✓	✓			Guar	240°F
PureStim B - HT ²	✓	✓					Guar	300°F
PureStim B - LP ²	✓						Guar	150°F
PureStim Z - HT	✓						CMHPG	375°F
PureStim Z - HS ²	✓	✓	✓	✓	✓	✓	Guar/CMHPG	270°F
PureStim Z - Clean	✓						CMC	260°F

¹It is highly recommended to perform lab testing using representative water samples for the job.

²HT = high temperature; LP = low polymer; HS = high salinity.

For proven, reliable control of fluid-system viscosity and proppant suspension in a variety of well conditions, contact us at NexEngineering@NexTierOFS.com.