

The STEP-XB instant borate crosslinked system is a shear stable high viscosity gel that remains unchanged over a wide range of temperatures. The system's properties can be optimized to achieve desired viscosities for proppant suspension. For minimized gellant loadings (below 2.4 kg/m³) or to minimize friction pressures, a delayed crosslink additive should be used.

The system is compatible in a wide range of temperatures from 20°C to 100°C. A gel loading of 2.4 kg/m³ can be used up to 70°C, but in temperatures from 70°C-100°C the gel loading must be 3.0 kg/m³ or greater.

Properties:

- High pH instant crosslinked system
- Ideal for a large range of temperatures
- Shear stable system, capable of rapidly re-healing
- Can be pumped with slurried or powdered guar
- N₂ can be used to energize the system

Physical Data:

Properties	
Appearance	Yellow liquid
Odour	Slight
pH	10.0 – 11.0
Vortex Closure	<10 seconds
Crosslink Time	10-20 seconds

Technical Data:

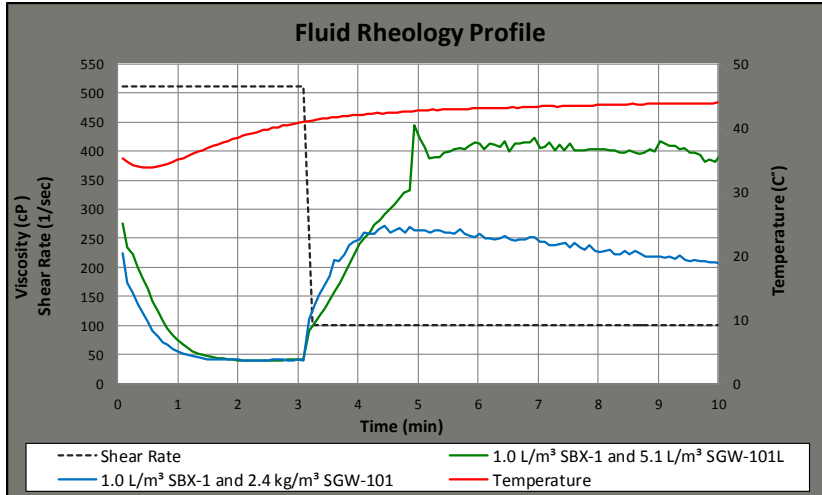


Figure 1: Shear recovery profile of a 2.4 kg gel after high shear simulating time to bottom.