

# G-2

## Polymer for Water Conformance



### Product Description

G-2 is a polymer product for water conformance developed by CNPC USA. It is specially designed for oil fields that have experienced long-term water flooding to increase production. It is used for in-depth water plugging and conformance of water injection wells in areas with high water production ratio and low sweep efficiency. It has the characteristics of low initial viscosity, controllable gel formation time, high gel strength and good stability.

### Advantages

- In liquid form that can be added in-situ
- Polymer dosage: 0.5-0.8 %
- Crosslinker dosage: 1000-2000 ppm
- Polymer solution initial viscosity: 1-3 cp
- Polymer gelling time: 3-20 days
- No chromium ions, environmentally friendly
- Application temperature: 40-130 °C

### Applications/Recommended Treatment

When the cross-linking agent dosage is 1400 ppm, the initial viscosity and gelling time of the gelant could be controlled by controlling the amount of polymer (0.5-0.8%). Before gel formation, the viscosity of the gelant solution remained stable, which is beneficial for the gelant to penetrate deep into the formation and perform water conformance control in the reservoir matrix.



### Typical Properties

- Appearance: off-white opaque liquid
- Polymer activity: 30 %
- Specific Density, 1.02-1.06 g/cm<sup>3</sup>
- Viscosity, 400-2000 cp
- Flash Point, > 210 °F/100 °C
- Pour Point, < 0 °F/-18 °C
- Soluble in water

### Packaging and Storage

- 265 Gal (900 Kg) totes (IBCs) or 55 Gal (180 Kg) drums
- Keep in the original container if it is not used all. Store the product in the containers with closed lids in a dry, cool and well-ventilated place.