

MONTAGEL™ BP 50

Water shut-off and relative permeability modifier technology in offshore and onshore O&G fields

Description

MONTAGEL grades of precrosslinked Polyacrylamides are used as active treatments for water shutoff and sand control in offshore and onshore oil and gas fields. Montagel BP 50 is classified as non-toxic and fully biodegradable by the OCNS organization.

Mechanism of action

High water cut can occur under various production conditions, such as moving oil-water contacts causing water coning and breakthrough, watered out layers or cross-flow in multi-layered reservoirs, or altered relative permeability.

Washed out Montagel™ BP 50 consists of colloidal particles of Acrylamide-based polymers crosslinked with organic covalent cross-linkers. In these environments, Montagel™ BP 50, microgels, once placed in the formation, are swollen by the water present in the formation pore space, and adsorb onto the rock surface.

Thereafter the microgel collapses under capillary pressure, with the water entrapped. The result is that the relative permeability of water decreases, allowing for oil flow. Relative permeability changes are also stable over a long period of time.

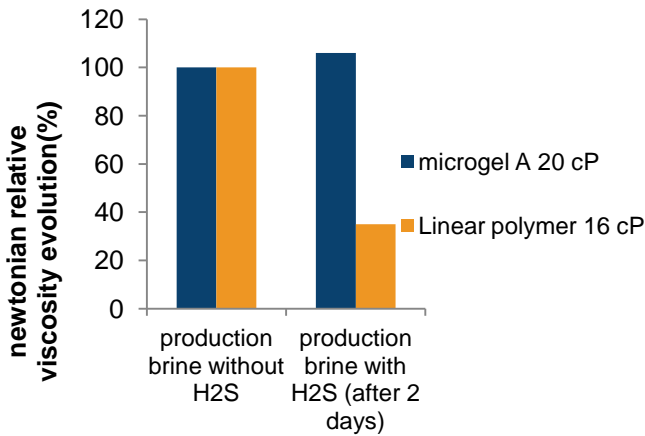
Features

- Narrow size distribution
- Excellent Thermal (up to 165°C) and chemical resistance
- Non-Toxic and comply with OSPAR regulation
- Water soluble
- Size controlled and narrow size distribution
- Not effected by parameters such as pH or presence of electrolytes
- Good injectivity and depth of propagation

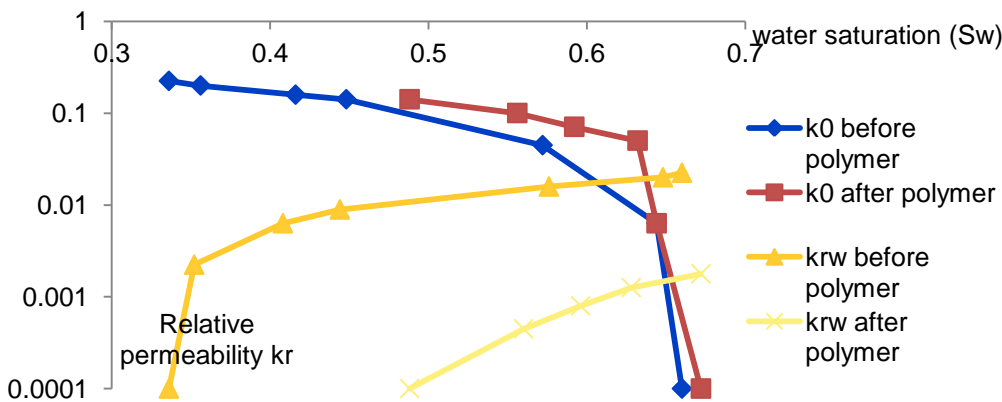
- *Reducing significantly the water permeability of the highest permeability layer*
 - *Size controlled and narrow size distribution*
 - *Electrolytes resistant*
 - *pH resistant*
 - *High temperature resistant*
 - *Non toxic*
 - *Fully biodegradable*
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Analytical data

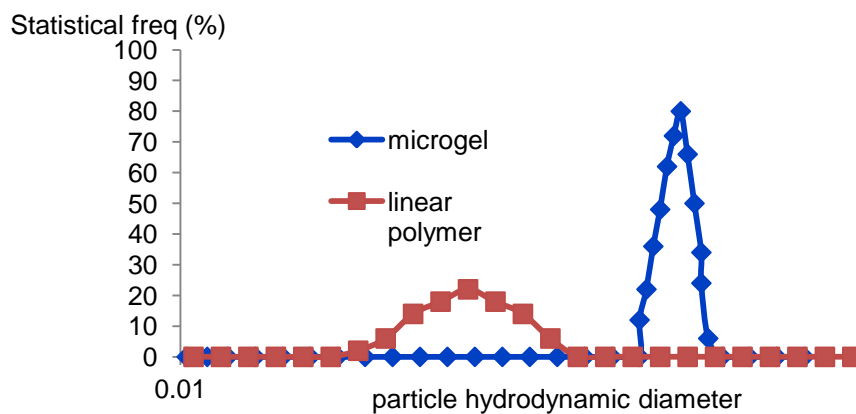
1. Viscosity evolution in H2S/without H2S production brine with microgel vs polymer



2. Kr selectivity effect induced by microgels



3. Narrow size distribution



Handling and Packaging

Montagel BP 50 is packaged in 25 kg boxes

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Nota:

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