Sorb family of solid chemicals

Offer long-lasting flow assurance

Applications

- Producing oil and gas wells

Features and Benefits

- Produces back at relatively constant rates unlike liquid inhibitors
  - Works on produced fluids before reaching the near-wellbore area, where pressure and/or temperature changes promote deposition
- Desorbs slowly; residual Sorb chemicals have appeared in production fluids at effective levels for four years after pumping
  - Carefully tested for compatibility with formation and stimulation fluids before use
- Allows two or more Sorb chemical products to be combined in treatments designed to solve multiple problems simultaneously with the use of the Baker Hughes **MultiSorb™ technology**
  - Active chemical systems include scale, paraffin, asphaltene, salt, and corrosion inhibitors as well as biocides

The Baker Hughes **Sorb™ family of solid specialty chemicals** safely and efficiently inhibits downhole deposition or tubular damage with slow-releasing and longlasting chemicals applied to a solid substrate and pumped deep into the formation. This means the chemical treatment begins before produced fl uids reach the sensitive areas where temperature or pressure changes commonly cause fl ow-assurance and corrosion problems.

Alternative Approaches

- Repeatedly squeezing liquid chemicals into the formation
- Continuously injecting liquid chemicals into the well
- Batch treating liquid chemicals into the well
- Pumping liquid inhibitors with a stimulation treatment

The Sorb Additive Solution

- Compatible chemicals are adsorbed onto a dry, granular substrate
- Solid material is pumped with proppant in a stimulation treatment and becomes integral to propped fracture
- Active chemical slowly desorbs as the well produces

1% by weight ScaleSorb particles with 20/40 mesh proppant

Sorb Family of Solid inhibitors	Maximum Temperature	Bulk Density	Specific Gravity Range at 60°F	Packaging	Application
ParaSorb™ 5013	300°F (149°C)	28 to 35 lbm/ft³	1.5 to 1.7 g/cc	50-lb bags	Paraffin
ParaSorb 5000	400°F (204°C)	28 to 33 lbm/ft³	1.7 to 1.9 g/cc	50-lb bags	Paraffin
ParaSorb EL 5000	300°F (149°C)	26 to 32 lbm/ft³	1.5 to 1.8 g/cc	50-lb bags	Paraffin
ParaSorb 5005	300°F (149°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	50-lb bags	Paraffin
ScaleSorb™ 3	325°F (165°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	25-lb pails/50-lb bags	General
ScaleSorb 4	220°F (104°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	25-lb pails/50-lb bags	Barium
ScaleSorb 6	325°F (165°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	25-lb pails/50-lb bags	General
ScaleSorb 8	500°F (260°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	25-lb pails/50-lb bags	High temperature
ScaleSorb 12	350°F (177°C)	37 to 45 lbm/ft³	1.7 to 1.9 g/cc	25-lb pails/50-lb bags	High iron
CorrSorb™ 3600	225°F (107°C)	28 to 33 lbm/ft³	1.2 to 1.6 g/cc	50-lb bags	Corrosion
CorrSorb HT	400°F (204°C)	37 to 45 lbm/ft³	1.2 to 1.6 g/cc	50-lb bags	Corrosion
AsphaltSorb™ 1200	300°F (149°C)	30 to 34 lbm/ft³	1.9 to 2.1 g/cc	25-lb pails	Asphaltene
BioSorb™ 1250	275°F (135°C)	37 to 43 lbm/ft³	1.4 to 1.7 g/cc	30-lb pails	Biocide

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