

## Riteks Clay Stabilizer-RS 70

Liquid Substitute for Potassium Chloride

### General Description

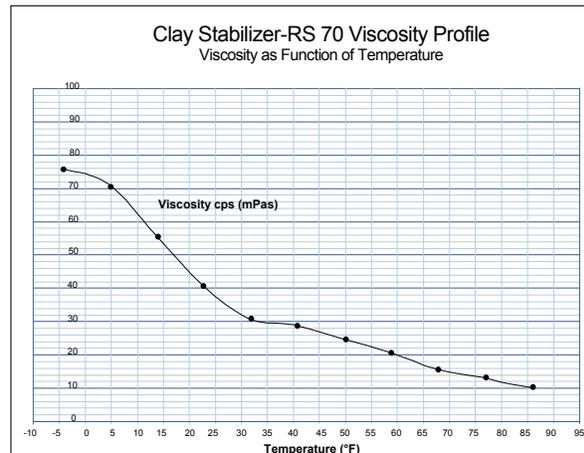
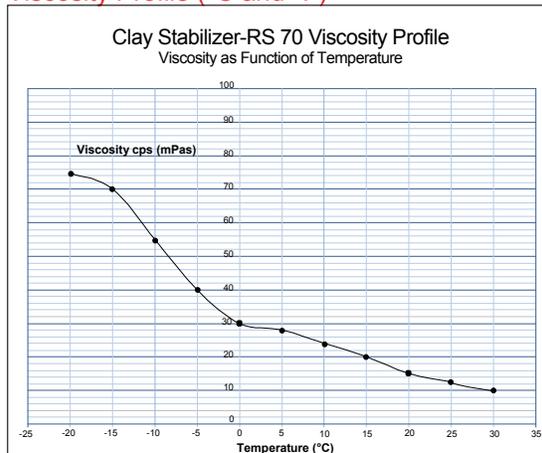
Riteks Clay Stabilizer-RS 70 is a liquid substitute for potassium chloride in oilfield applications. Riteks Clay Stabilizer-RS 70 is a permanent clay stabilizer that functions by inhibiting clay swelling and mitigation. It shows superior performance and can be used at much lower levels (.25 - 1% vs 2%> for KCl depending on formation mineralogy). Clay Stabilizer-RS 70 is compatible with other drilling auxiliaries and is non-toxic and biodegradable. Clay Stabilizer-RS 70 is also used extensively as an environmentally friendly feed grade highly concentrated organic salt.

Clays contain cations, typically sodium, within their crystalline layers that occupy base exchange positions or sites in the clay structure (lattice). Upon contact with water, these cations are solubilized resulting in clay instability and swelling. When clays swell, the permeability of the formation is diminished, which impedes production. Clay stabilizers reduce clay swelling through ion exchange, where the clay stabilizer provides a cation to replace the native, solubilized clay cation, sodium.

### Recommended Loading

Riteks Clay Stabilizer-RS 70 typical concentration ranges from 0.7 to 1.5 gpt (L/M3) of the base fluid to give an equivalent temporary clay stabilization of 2% potassium chloride or 1 to 2 gpt (L/M3) equivalent of TMAC (50%). Higher loadings are recommended if clay sensitivity poses an issue with regards to formation damage.

### Viscosity Profile (°C and °F)



### Typical Data

CAS #: 67-48-1

Molecular Formula: C<sub>5</sub>H<sub>14</sub>ClNO

Density: 9.00 lb/gal (1.08-1.09 Kg/L)

pH: 6.5-8.0

Solubility in water: Soluble

Solubility in Hydrocarbons: Insoluble

Appearance: Clear to light amber liquid

Odor: Amine "Fishy" to "sweet corn" odor

Boiling Point: 257°F (125°C)

Freezing Point: -10°F (-23°C)

Flashpoint: >200°F

*Typical properties given do not constitute a supply specification.*

### Packaging / Storage

Store in dry cool place. Keep in closed containers below 120° F.

### Health and Environmental Data

Before handling or using this product please refer to the Safety Data Sheet for complete health, safety and environmental information. Dispose of waste in accordance with local, state and federal regulations.

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