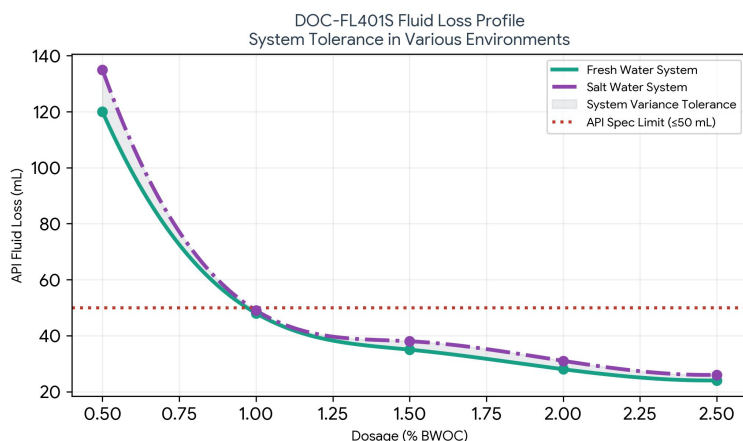


DOC-FL401S Anti-Channeling Fluid Loss Additive

Multicomponent Copolymer for Superior Suspension and Gas Channeling Control

1. Performance Highlight (Dosage vs. Fluid Loss Curve)

According to laboratory evaluations, the typical relationship between product dosage and fluid loss under constant testing conditions (Time: 30 min | Temperature: 80°C | Pressure: 6.9 MPa) for both freshwater and saltwater systems is demonstrated below:



2. Features & Benefits

- **Dual Functionality:** Acts as a multicomponent copolymer that excellently controls and reduces fluid loss while providing anti-gas channeling properties.
- **Excellent Salt Resistance:** Demonstrates robust salinity tolerance, making it fully applicable in both freshwater and saltwater cementing environments without losing performance.
- **Superior Suspension Stability:** Enhances the suspension stability of the cement slurry system, effectively preventing settlement while maintaining optimal slurry fluidity.
- **Anti-Gas Channeling:** Promotes a short transition time (40-100 Bc transition time ≤ 10 min), which is critical for preventing gas migration and ensuring long-term zonal isolation.

- **Stable Thickening Profile:** Exhibits stable thickening behavior with a well-correlated strength development over time (≥ 14 MPa at 24h, 80°C).
- **High-Temperature Tolerance:** Applicable for cementing operations in high-temperature environments up to 180°C (356°F BHCT).

3. Technical Specifications & Slurry Properties

Property Item	Technical Specification / Index
Appearance	White to earth-yellow solid
Water Solubility	Water-soluble
Odour	Non-irritating
Recommended Field Dosage	1.0% - 2.0% (BWOC)

Slurry Performance Item	Index	Test Condition
Slurry Density (g/cm ³)	1.90 $\pm$ 0.05	25°C, Atmospheric pressure
Water Loss (mL)	≤ 50	80°C, 6.9 MPa (Freshwater & Saltwater)
Free Fluid (%)	≤ 1.4	Ambient
Initial Consistency (Bc)	≤ 30	80°C / 45min, 46.5 MPa
Transition Time (40-100 Bc, min)	≤ 10	80°C / 45min, 46.5 MPa
Thickening Time (min)	50 - 150	80°C / 45min, 46.5 MPa
Compressive Strength (MPa)	≥ 14	80°C, Atmospheric pressure, 24h

** Note: The experimental data are based on Chinese G-grade cement. There may be differences in test data when using cement from different countries and regions.*

4. Compatibility, Packaging & Storage

- **Compatibility:** DOC-FL401S has good compatibility with other commonly used cementing additives.
- **Packaging:** Packaged in 25 Kg bags, or according to specific customer requirements.
- **Storage Conditions:** Should be stored in a cool and dry place to prevent exposure to sun and rain. Keep away from heat and fire sources. The product has a shelf life of 24 months. If the shelf life is exceeded, it must be inspected and qualified before use.

To obtain the Material Safety Data Sheet (MSDS) or to learn more about laboratory application schemes, please contact us directly:
Website: www.dicoenergy.com | Technical Support Email: info@dicoenergy.com