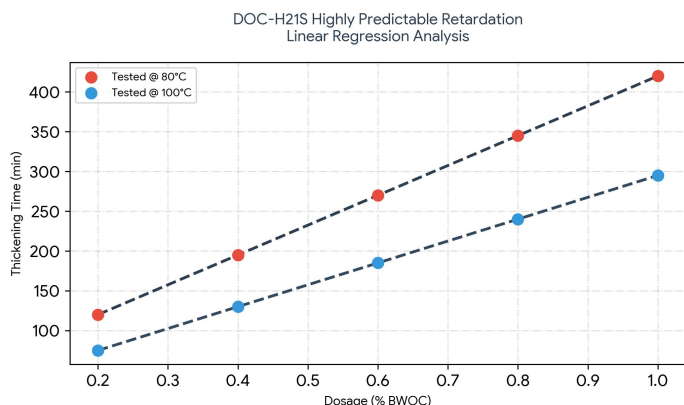


DOC-H21S Low-Medium Temperature Retarder

Compound Organic Acid Retarder with Excellent Linear Thickening Profile

1. Performance Highlight (Dosage vs. Thickening Time)

According to laboratory evaluations, DOC-H21S exhibits a highly predictable, linear relationship between product dosage and cement slurry thickening time. Typical performance curves at different BHCT (Bottom Hole Circulating Temperatures) are demonstrated below:



2. Features & Benefits

- **Excellent Linear Thickening Profile:** Provides a highly predictable, linear extension of thickening time as dosage increases, ensuring safe and controllable pumping operations.
- **Zero Negative Impact on Slurry:** Prolongs thickening time without adverse effects on other crucial properties of the cement paste, including the final compressive strength development.
- **High Water Quality Tolerance:** Has no special requirements for slurry water quality. Completely soluble and effective in various water conditions.
- **Wide Temperature Applicability:** Specifically designed for well cementing across a broad low-to-medium temperature range of 20°C to 121°C (68°F to 250°F BHCT).

- **Great Compatibility:** Highly compatible with other commonly used cementing additives (such as fluid loss agents and dispersants).

3. Technical Specifications

Property Item	Technical Specification / Index
Appearance	White powder
Water Solubility	Completely soluble
Moisture (%)	≤ 10.0%
Applicable Temperature Range	20°C - 121°C (BHCT)
Recommended Field Dosage	0.1% - 1.0% (BWOC)

** Operational Notice: When the Bottom Hole Circulating Temperature (BHCT) exceeds 100°C (212°F), the required dosage will increase significantly to maintain the target thickening time.*

4. Packaging & Storage

- **Packaging:** Packaged in 25 Kg three-in-one compound bags, or packed according to specific customer requirements.
- **Storage Conditions:** Store in a ventilated, cool and dry environment to avoid exposure to direct sun and rain. The warranty period (shelf life) is 12 months.

To obtain the Material Safety Data Sheet (MSDS) or to learn more about laboratory application schemes, please contact us directly: QINGDAO DIMENSIONAL COPOLYMERIZATION ENERGY CO., LTD.

Website: www.dicoenergy.com | Technical Support Email: info@dicoenergy.com