

PRODUCT DATA SHEET

GD-2 Flow modifier for Oil Well Cementing**Product Description**

After mixing the flow pattern regulator GD-2 into the oil well cement, the hydrophobic group of the flow pattern regulator GD-2 is directionally adsorbed on the surface of the cement particles. The hydrophilic group points to the aqueous solution, forming a single-molecule or multi-molecular layer adsorption film. Due to the directional adsorption of surfactants, the cement colloid surface has the same sign of electric charge, so under the action of the same sex repulsion, not only can the cement-water system be in a relatively stable suspension state. It can also disperse and disintegrate the flocculated structure formed by the cement at the initial stage of adding water, so as to release the water in the flocculated structure to achieve the purpose of improving flow pattern of cement slurry.

Characteristics

- GD-2 is a colorless and transparent solution.
- The normal dosage is: 1.0%-2.0% , and it is not confined to this range in some particular case.
- Increasing additive dosage, it can adjust the rheology of the cement slurry effectively, and reduce the consistency.
- Consolidate cement stones, enhance its compression strength and control fluid loss.
- With certain retarding property.
- Mixed with water.
- Good compatibility with other additives.

Technical Specification

Items	Specification
Appearance	Homogeneous and mildew-free liquid
Density,g/cm ³	1.08±0.02
Thickening time /85℃,46.2MPa,50min	≥ Blank grout
Rheology/85℃,0.1MPa	n K,Pa.s ⁿ
	≥ 0.50 ≤ 0.70
Compression strength /85℃,0.1MPa,24h	≥ 14.0

Blank cement slurry formulation: Grade G oil well cement, calculated on the basis of dry ash weight, the addition of fluid loss agent G33S is 1.0%, and the water-cement ratio is 0.44.

Experimental cement slurry formulation: G grade oil well cement, calculated on the basis of dry ash weight, the addition of fluid loss agent G33S is 1.0%, and the addition of flow modifier GD-2 is 1.0%.

Packing, Storage

- Be sacked with plastics barrel, 25kg per barrel.
- Be kept away from moisture and possible damage of the packages in transportation, and stored in cool and dry situation.
- Storage life time is one year.