

## Liquid PHPA (EM35)



EM35 is a liquid drilling mud additive based on an oil emulsion of a multimolecular polymer of the PHPA type (partially hydrolyzed acrylamide copolymer). The product is easily soluble in water and has a multifunctional effect. In the technology of drilling muds, the EM35 polymer is used as a flocculant and as a means of reducing the hydration of clay rocks. Well drilling practice shows that the time required to clean the well and achieve full capacity is shorter than with bentonite muds, which cause significant damage to the permeability of aquifer rocks. We recommend that EM35 be added slowly through a hydraulic mixer and continue mixing for about 15 minutes, i.e. until the polymer is completely dissolved in the drilling fluid.

### The addition of EM35 Polymer to the mud results in:

- formation of encapsulating shells and reduction of hydration of drilled clay rocks,
- stabilization of the walls of the borehole by reducing the swelling of clays and clay rocks,
- improvement of coring results,
- increase of mud viscosity,
- improvement of the mud's ability to clean the drilling tool and remove the cuttings from the borehole,
- reduction of torque and friction forces when extracting drill rods by improving the lubricating properties of drilling fluid,
- at low concentrations of 10-100 g/m<sup>3</sup> it causes flocculation of drill cuttings and prevents solid phase dispersion in the drilling fluid,

### Dosage

1.5-4.0 liters per 1 m<sup>3</sup> of drilling fluid.

### Properties

Appearance	white, slightly viscous emulsion
Density	1040 kg/m <sup>3</sup>
Solubility in water	fast and total
pH of 0.5% solution	7.5

## Packaging

EM35 is delivered in 25 kg plastic drums.