

Features:

PHPA is short for partially hydrolyzed polyacrylamide, it's a kind of drilling mud additive.

Can be used in both industrial and oil / gas drilling.

Can be used in both fresh water and brines but requires high temperature.

Applicable in: shale stabilization, viscosities, friction reduction, fluid loss control and lubrication.

Specifications:

Appearance:	White Granule Powder
Ionic Charge:	Anionic
Molecular Weight:	20-30 Million
Granule:	20-60 mesh
Solid Content:	≥90%
Hydrolysis Degree:	30-45%
Dissolving Time:	≤60 minutes
Marsh Viscosity (seconds)	60-90 (API standard)

Main Application:

Oil-displacing Agent of Oil Field Tertiary Oil Recovery:

It can adjust the rheology of filled water, increase the viscosity of driving liquid, improve water drive wave and efficiency, lower water phase permeability in ground layer, and enable water and oil to flow forward at even speed. Its effect is that it is mainly used in tertiary oil recovery of oil fields in the aspect oil production, and raw oil of about 100 to 150ton more can be produced through filling the macromolecule polyacrylamide product one ton.

Well Drilling Mud Raw Materials:

In oil field exploration and development and exploration of geology, water and coal, it is used as adhesive of well drilling mud raw materials, can improve the service life of drill bits, improve the drill speed and drilling footage, and reduce plug in replacing drill, and has prominent well slough preventing effect, and it can be used as fracturing fluid of oil fields or plugging agent of controlling profile and plugging water.

Flocculant:

The polarity gene adsorbs the solid particles dispersed in water, bridges between the particles and formats the large aggregates, sedimentation and separates of water, flocculates detritus and clay in drilling fluid.

Dispersant:

In the drilling mud treatment, this product can improve the lubricity and stability of the mud to reduce the water loss, prevent sticking effectively, increase drilling efficiency.

Blocking Agent:

The product can generate cross linking under the effect of Al^{3+} , Fe^{3+} , Ca^{2+} and other ions, a part of high molecular compound is changed from linear shape into body shapes. The product is not watersoluble, and can be adsorbed on the borehole to block ground layer gaps and to prevent the leakage of drilling fluid.

Lubricant:

The product can be absorbed on the surface of metal or clay particles to form liquid film to change friction on the solid surface into liquid friction, thereby lubricating drill bits and drills, lowering the mud cake friction coefficient, and reducing underground accidents.

Fluid Loss Additive:

The hydrolysis degree is higher, the hydration group on the molecular chain is more, the hydration is better, and it changes from flocculant into fluid loss additive. Drilling mud should be treated to keep cake's permeability as low as possible in order to maintain a stable borehole and to minimize filtrate invasion, and damage to the pay zone.

Shale Inhibition Agent:

The multipoint adsorption of polymer formats to the crisscross membrane macromolecules, plays a role of enhancing the stability of borehole.