

## Polymer P-24



P-24 is high molecular weight anionic polymer. It is acting as flocculant, shale inhibitor agent and viscosifier. The effect of the product depends mainly on the exchange of electric charges between those on the reactive groups of the polymer chain and electrically charged centers on the surface charges of the suspended solid particles. The surfaces of the particles are destabilized and flocculation takes place.

An addition of the P-24 to the water based drilling mud is resulting in :

- increase of viscosity
- enhance of lubrication properties
- friction reducing
- inhibition of clay swelling and sloughing
- improvement of recovery of cores, especially in unconsolidated formations

## Application

Generally, P-24 is used in highly diluted aqueous solutions. It is possible to first prepare a stock solution (0.3 – 0.5 wt. %) and to dilute this before use, or to prepare a feed solution (< 0.05 wt. %). To achieve full effectivity 60 minutes gentle stirring (at a temperature of approx. 20°C) is necessary.

In water base drilling fluid:

10-100 g/m<sup>3</sup> flocculation of cuttings

0,5-2,0 kg/m<sup>3</sup> inhibition of clays and loams

## Storage

P24 is sensitive to moisture, such as condensation, water droplets and humidity. Contact with water (droplets) can lead to local formation of knots and lumps. The product should therefore be stored in dry, closed containers and protected against moisture. The containers should be resealed after removing the material. The storage temperature should not exceed 40°C for long periods.

## Properties

Composition:	high molecular weight, medium anionic polymer
Appearance:	white to light yellow granules

Charge type:	anionic
Bulk density:	approx. 700 kg/m <sup>3</sup>
Viscosity (0.5 % in deionized water):	approx. 5500 mPa*s
Viscosity (0.1 % in deionized water):	approx. 600 mPa*s
Viscosity (0.5 % in tap water):	approx. 1200 mPa*s
Viscosity (0.1 % in tap water):	approx. 30 mPa*s
pH-value (0.1 % in tap water):	approx. 7
Effective in pH-range:	6-10
Residual monomers:	< 200 ppm

## Packaging

25 kg bags or 650 kg big bags