## **Product description**

<u>Sodium carboxymethyl cellulose</u> is a white or slightly yellow powder. It is odorless, non-toxic, tasteless, hygroscopic, and dissolves in water as a viscous liquid. It is a polyanionic electrolyte, not fermented, with salt resistance and thermal stability. In the drilling fluid is an anti-high temperature, anti-salt efficient fluid loss additive.

1. High viscosity CMC can increase the viscosity of drilling fluid, ensure the suspension of specific gravity of material, salt resistance and can improve the oil recovery rate of oil-bearing formations.

2. Simple on-site application process, convenient maintenance and handling, low dosage of treatment agent, low cost of drilling fluid.

3. Non-toxic, harmless, non-polluting to the environment.

## Advantages

<sup>①</sup>Mud containing CMC can make the well wall form a thin but firm, low permeability filter cake, so that water loss is reduced.

<sup>(2)</sup> Adding CMC to the mud can make the rig get a low initial cutting force, so that the mud is easy to release the gas wrapped in it, and the debris is quickly discarded in the mud pit.

③ drilling mud and other suspended dispersions, as well as a certain period of existence, the addition of CMC can make it stable and extend the period of existence.

④ CMC-containing mud, rarely affected by mold, so there is no need to maintain a high pH value, and no need to use preservatives.

⑤ CMC-containing mud as a drilling mud cleaning fluid treatment agent, can resist contamination by various soluble salts.

 $\textcircled{\sc stable}$  The mud containing CMC is stable and can reduce water loss even at a temperature above 150°C.

High viscosity, high degree of substitution of CMC for smaller density of the mud, low viscosity and high degree of substitution of CMC for high density of the mud. Selection of CMC should be based on the type of mud and regional, well depth and other different conditions to decide.

## Application

CMC is widely used in the preparation of water-based mud (drilling fluid) in petroleum drilling engineering, to control the amount of water loss during drilling, to prevent the occurrence of accidents such as well wall collapse caused by mud loss during drilling, and to control the viscosity of the mud and the mud treated with CMC will not be fermented, the mud cutting force is low, and the drilling debris will not sink easily when it is stationary. Usage: Add directly or into the mud with 0.1-0.2 percent in fresh water mud and 0.5-0.8 percent in saturated brine mud.

