Partially Hydrolyzed Polyacrylamide (PHPA)®

Product Description

This product offers excellent shale control, wellbore stability, coating and dispersion, viscosity enhancement, and filtrate reduction properties. It effectively prevents shale hydration and swelling, reduces cuttings dispersion, improves the drilling fluid's cuttings-carrying capacity, and ensures safe and efficient drilling operations.

PHPA forms a protective film on the wellbore wall, enhancing wellbore stability and reducing the risk of complex downhole conditions such as wellbore collapse, borehole narrowing, and stuck pipe. The product exhibits good salt and calcium resistance and is compatible with a variety of drilling fluid additives, making it suitable for freshwater, seawater, and high-salinity water-based drilling fluid systems.

Applications/Features

- Excellent shale control performance
- Effective coating and plugging action
- Increases drilling fluid viscosity and sand-carrying capacity
- Reduces fluid loss and improves drilling fluid performance
- Suitable for complex formations and challenging drilling operations

Technical Indicators

Item	Specifications
Appearance	White granules or powder
Hydrolysis Degree	20%–30% (customizable)
Molecular Weight	Medium to high molecular weight
Solid Content	≥88%
Dissolution Time	≤60 minutes
pH Range	6–9
Salt Tolerance	Excellent