



DRILLING FLUID PRODUCTS

TECHNICAL INFORMATION

IM-GEL™ 100 POWDER PHPA CO-POLYMER

High temperature Fluid Loss Additive and Rheology Modifier Aid for Water Based Drilling Fluids

IM-GEL™ 100 is powdered acrylic co-polymers designed to improve performance of all types water based mud systems (WBM). IM-GEL 100 imparts shale and bore-hole stability, viscosity modification, lubricity, selective flocculation and assists with fluid loss control. IM- GEL 100 provides a cost effective means of controlling drilling fluid characteristics and improving performance in a wide variety of fluid environments.

Product Specifications:

Property	Specification
Ionic Nature	Anionic
Bulk Density (kg/m ³)	350 - 450
pH (1% solution)	7.5 – 8.5
Viscosity (10% solution, cPs)	400 - 600
Appearance	White granular powder

Applicable Fluid Types:

IM-GEL 100 is applicable in the following general types of fluid systems

- Freshwater mud
- Seawater and saltwater mud (up to and including saturation)
- KCl and Muds with divalent ions
- Solids free brine (NaCl, KCl and CaCl₂)

Functions:

IM-GEL 100 has the following benefits in the above mud systems:

- Provides effective control and modification of important drilling fluid properties with immediate effect and with low toxicity.
- Enhances the removal of drilled solids and improves penetration rates by reducing friction characteristics of the treated drilling fluid.
- Excellent foam stabilizers for air drilling, while improving carrying capacity.
- Improve the character and consistency of wall cake, thereby reducing the potential for stuck pipe.
- Maintains performance at down-hole temperatures in excess of 200 °C

Recommended Treatment:

Concentrations in the range of 0.5 – 4.0 lb/bbl are recommended. The quantity used would be dependent on the drilling fluid system, drilling depth and equipment.

It is recommended to be added directly via centrifugal mixers or pre-mixed. Bentonite should be added to system prior to adding IM-GEL 100. Keep mud density below pH 11.

Packaging:

Packaged in 25 kg multi-wall paper sacks and HDPE pails.

Legislation and Handling Recommendations:

Not restricted by any regulatory agency. Refer to the Material Safety Data Sheet (MSDS) for the product prior to use.

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