



Polyanionic Cellulose High Viscosity (PAC R 90%)

Technical Data Sheet

CAS No.- 9004- 32-4

Grade- Polyanionic Cellulose High Viscosity (PAC R 90%)

Molecular formula- $[C_6H_7O_2(OH_2)OCH_2COONa]_n$

Product Description

PAC R is a high-performance, water-soluble polymer designed for use in water-based drilling fluids. It functions as both a filtration control agent and a viscosifier, reducing fluid loss while improving the suspension of solids. Its chemical stability and broad fluid compatibility make it an ideal choice for enhancing operational efficiency across diverse drilling conditions.

Applications

PAC R is a cost-effective additive used to reduce API filtration rates and support rheological properties in a wide range of water-based drilling fluids. It performs effectively in freshwater, seawater, saturated saltwater, solids-free brines, native and flocculated muds, inhibited muds, and contaminated systems. Its versatility makes it suitable for both onshore and offshore drilling operations.

Specifications

Standard	PAC R 90%
Test Method	API 13A & ASTM
Appearance	Free-flowing white to creamish powder
Solubility in water	Completely soluble
Starch presence	Absent
Moisture content, max. %	10
Apparent Viscosity (Fresh water 1% soln. min.)	50 cps
Apparent Viscosity (Sea salt 1% soln. min.)	50 cps
pH (1% soln. deionized water)	8 - 10
Active Matter (Purity), min. %	≥90
Degree of substitution (min.)	0.9
API Filtrate Volume (max. ml)	23
Bulk Density (kg/m ³ min.)	≥500
Temperature stability (°C)	≥150
Specific gravity (g/cm ³ at 20°C)	1.5 - 1.6

Packing and Storage

PAC R 90% is packaged in 25 kg or 50 lb. in kraft paper bag or as per customer requirement. Store in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

Recommended Handling

All personnel handling this material must handle it as an industrial chemical, wearing protective equipment and observing the precautions as described in the Safety Data Sheet (SDS).

The above information is best to our knowledge and provided for manufacturing purposes. Al Battal Factory for Chemical Industries Company makes no warranty or guarantee concerning the handling, use or application of such product whether alone or in combination with other products in case unexpected events occur. Users are advised to make their own tests to determine the suitability and performance of the product.