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Product name: **POLYFLOC AE**

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Product description: POLYFLOC AE is a high molecular weight, liquid grade anionic acrylamide emulsion.

- Principal uses:
- POLYFLOC AE is used as a flocculant in the separation of solids for a wide variety of applications, including the cleaning of water based drilling mud, waste drilling mud, tunnelling machine slurry, site run-off water and process water.
  - The flocculated solids can be allowed to settle in mud pits or may be removed by mechanical methods such as centrifuging.

Characteristics: The concentration of POLYFLOC AE required will vary widely depending upon solids concentration, ionic character of the fluid, pH of the mud and the type of solids present. For muds having high concentrations of solids it may be necessary to dilute the mud with water before flocculation treatment, as above a certain concentration, solids interfere with and/or inhibit polymer performance. Laboratory tests should be performed on samples to pre-determine the type and quantity of chemical addition that is likely to be required. The use of an organic or inorganic coagulant prior to the addition of the POLYFLOC AE often helps the process.

Mixing: POLYFLOC AE mixes very easily with water but it should be added at a point of high turbulence. Ideally a dilute stock solution (0.1% to 1.0%) should be made and the stock solution added to the mud. Best results are obtained when POLYFLOC AE is added to water in a mixing tank and agitated for 20 to 30 minutes before use. As a guide, the concentration of POLYFLOC AE may range between 100 and 2000ppm of fluid, after suitable water dilution has taken place (0.1 to 2.0kg/m<sup>3</sup> of fluid).

Packaging, Storage & Handling: POLYFLOC AE is packaged in 25kg plastic drums but other packaging is available to order. It has a long shelf life if stored in a cool dry place, avoiding extreme temperatures. The product is classified as an irritant to the eyes and skin. It is recommended that gloves, goggles and protective clothing be worn. Spillages should be contained with an inert material and removed for disposal. The product is very slippery when wet. Further information on handling and use can be found in the relevant Safety Data Sheet. Prior to use, the POLYFLOC AE should be agitated thoroughly as settlement can occur if stored for long periods.

Properties:

Chemical type:	Anionic polyacrylamide emulsion.
Appearance:	Liquid
Colour:	Off-white
Odour:	Slight hydrocarbon
pH 1% solution:	7
Solubility in water:	Appreciable
Boiling point:	~175°C
Freezing point:	-18°C
Specific gravity:	1.0g/cm <sup>3</sup>
Flammability:	Non-combustible