Technical Data Sheet

Quellon WP

Product description:

Bentonite clay pellets with very high swelling capacity and enhanced gamma ray activity to produce waterproof sealings. Preferred application for the completion of boreholes drilled with rotary mud methods.

Product characteristics:

Appearance:	Clay pellets	
Dimension (length):	8-14	mm
Dimension (diameter):	10	mm
Swell compressive strength:	10	N/cm²
Gamma ray activity:	approx. 100	API
Bulk density:	1,0	g/cm³
Coefficient of permeability k_f:	$< 2 \times 10^{-11}$	m/s
Sinking speed (water):	25	m/min
Structural stability:	4	class

Field of application:

Due to the high swelling capacity very good and tight annular sealings will be achieved. The excellent swelling capacity of Quellon WP ensures a strong attachment of the seal to the borehole wall and the installed casing, without any leakages along the surfaces of contact. Sealants made of Quellon WP have a high safety margin. Even borehole enlargements, which are difficult to fill up are sealed securely through swelling, with up to 45% expansion. Smooth surfaces and the high structural stability of the Quellon WP pellets delay swelling and prevent untimely dispersion. Annular seals made from Quellon WP are highly detectable by means of gamma logging.

Determinations of requirements:

1. Borehole backfill:
   Borehole diameter²[dm] x 7,85 → Quellon WP [kg/m]
2. Annular sealing:
   (Borehole diameter²[dm] - casing diameter²[dm]) x 7,85 → Quellon WP [kg/m]

Form of delivery:

Quellon WP is available in 25 kg plastic bags and 1 t big bags