

KF-R - complex colmatizing fillers for drilling fluids

Manufacturer AO "NPO Policell" (joint stock company, Russia)
TS 2458-052-56864391-2012



Complex colmatizing fillers (colmatants) consist of lamellar calcium carbonate in the form of crystals of organic calcite, granular mineral fillers and modifying additives. Designed to prevent and eliminate the absorption of drilling fluids. Complex colmatizing fillers are represented by two grades: KF-5R and KF-30R.

Product Characteristics

	KF-5R	KF-30R
Color	White, cream, grey	
Mass fraction of water, %, not more than	10,0	
PH of the aqueous extract at 4% content of the reagent filler, units	8-9	
Solubility in 15% solution HCl, %, not less	99	

The granulometric class and type are marked as follows:

KF-5R - 95% of the particles have a size less than 5 mm;

KF-30R - 95% of the particles have a size less than 30 mm.

Application

Colmatants have a wide fractional composition: KF-5R - from 0.04 to 10 mm, KF-30R - from 0.04 to 30 mm. Division by grades is due to the convenience of choosing the optimum size of the colmatizing particles for clogging cracks in permeable rocks. Complex colmatizing fillers effectively seal permeable layers, have minimal effect on the rheological properties of drilling mud and are acid-soluble, which allows them to be used in the opening of productive absorbing layers. The grade of the using colmatants is determined in accordance with the specific drilling conditions.

Treatment

Treatment of drilling fluid with colmatizing fillers in an amount of 2-4% of its weight leads to decrease the breakaway torque at the boundary of the filter cake-disc by 100%. To prevent absorption and filtration losses of drilling mud is recommended to use in an amount of 5-20 kg/m³ of drilling mud. To loss circulation control the consumption of colmatants increases to 30-50 kg/m³ in viscoelastic compositions.

Packaging

The product is supplied in polypropylene bags with polyethylene liners of 50 kg or in soft containers of single use with a volume of 1 m³ of big bag type at 800 kg.

Национальный Буровой Сервис



Storage

The product is stored in warehouses. It is allowed to store the product under a canopy or on a planned site, protected from mechanical damage, precipitation, soil moisture and away from sources of fire. Guaranteed storage period is 36 months from the date of manufacture, if the consumer observes the requirements of transportation and storage.

Hazard Class

Low-risk product. The hazard class is 4.