

**MUD ACID COMPOSITION OF BRAND KR-2  
FOR WELL TREATMENT IN TERRIGENOUS RESERVOIRS  
TU – 2458-001-79640352-2009**

**KR-2HK MODIFICATION**

**Function**

Concentrate for mud acid composition preparation in field and steady-state conditions.

**KR-2HK** composition is used for simple mud acid treatment (MAT), as well as for high-tech bottom-hole treatment (BHT) with different reservoir stimulation technologies of wells with the terrigenous collector, with high resin content oil and surfactants – asphaltenes, during realization of which there is some risk of resistant acid-oil emulsions formation and settling of colmatage sediment of insoluble salts of iron, aluminum, barium, etc. Also complications induced with high reservoir temperature (higher then 90°C).

**Range of application**

**KR-2HK** acid composition is used for intensification of flow of oil and gas in producing wells with carbonate collectors, which lowered productivity due to formation of colmatant in bottom-hole areas.

**KR-2HK** acid composition is recommended for oil wells, prone to resistant acid-oil emulsion formation.

**KR-2HK** acid composition:

- - prevents the formation of resistant high-viscosity oil emulsions and secondary sediments;
- slows the reaction speed of the acid with the reservoir rock in 5-12 times, providing a deep penetration of the agent into the layer;

**Basic properties of the composition**

Appearance	Liquid from yellow to reddish colour
Mass fraction of hydrogen chloride,%, in the range of	21,0-32,0
Mass fraction of hydrogen fluoride,%, in the range of	4,0-5,0
Density at at 20 °C, g/cm <sup>3</sup>	1,12-1,18
Mass fraction of iron,%, no more than	0,001

- effectively washes the pores of the filter cake from asphalt, resin, and paraffin deposits;
- collector perforation walls get hydrophobized, resulting in deeper penetration of acid in a layer while increasing its permeability to oil;
- stabilizes the iron ions in solution by dissolving the iron-containing rocks and sediments, provides a low corrosivity.

**Production and delivery**

Acid composition **KR-2HK** is produced in the form of of concentrate for acid compositions preparation in the field and steady-state conditions.

Shipment of acid composition made from production facilities in cities of UFA and Buzuluk:

1. In bulk – in rail tank cars, fiberglass, gummed, plastic lined tank car;
2. Packaging – in 1 m<sup>3</sup> IBC-containers; in 227l of plastic barrels.

**Usage**

In a case when acid composition **KR-2HK** is delivered as a concentrate the desired concentration of the working solution is reached by diluting fresh water.

The visiting specialists on "Krezol" solutions service will provide you with the selection of optimal consumption rates and acid composition **KR-2HK** injection technologies on specific fields of the Customer.

**Certifications**

