



TECHNOLOGIES OF MODIFICATION OF BARITE MASS WITH DIFFERENT STABILIZING REAGENTS - MIXED VAPOR COMPOSITE PRODUCTION

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Article history:	Abstract:
Received: 11 th October 2022 Accepted: 11 th November 2022 Published: 20 th December 2022	Closing the technology of modification of bapit ore-based aggregates with improved properties for the evaporation mixture from local raw materials and closing them for industrial production. In this way, the baptismal font, which is imported from abroad in exchange for a large amount of foreign currency, can be suppressed an expopt-oriented component is obtained from an analog that is cheaper than the original price, and the efficiency of which is surprisingly high with a few beeps.
Keywords: Barite, cellulose, waterproofing index, oil and gas networks, drilling reagent, stabilizer, clay soil, brittleness, amount of base substance, cotton lint, polymerization rate, pentosan, alkali sediment, ash content, moisture, concentration, parameter, optimal conditions, destruction.	

The density of the drilling fluid for the well should be sufficient to ensure that the fluid pressure on the walls exceeds the formation pressure by 10–15%.

This is achieved by introducing heavy components into the solution. In most cases, the weighting agent is barite concentrate - sodium sulfate.

barite concentrate

The mud weighting agent for drilling should be chemically inert, insoluble in water and oil, non-abrasive, heavy enough.

All of these properties are possessed by class B barite concentrate grades KB-3 - KB-6. Below are its specifications:

barium sulfate content - 80 - 90%;

- density – 4 – 4.2 g/cm³;
- pyrite content - less than 6%;
- content of water-soluble salts - 0.35 - 0.45%;
- fraction fraction 5 microns - 10 - 20%;
- humidity - up to 2%.

Barite is classified as a low-risk substance. Its dust has a negative effect on the body with prolonged inhalation.

When preparing the solution, it is necessary to use respiratory protection. The product is supplied in the form of a powder packaged in soft containers of 1 - 1.5 tons or 50 kg bags.

The use of barite for the manufacture of drilling fluids

Barite mud is made by adding a weighting agent to the drilling fluid. For this, hydraulic mixers, jet-type hydraulic mixers are used.

Barite powder enters the solution through a plate feeder. The clay solution should have a viscosity of 22–24, a static shear stress of 4–5 Pa, and a water loss of 10 cm³/30 min.

The use of barite weighting agent will allow:

provide the necessary hydrostatic pressure of the solution on the walls of the well;

- prevent collapse of the well walls, penetration of oil, water, gas into the well;
- reduce drilling equipment wear and drilling costs;
- increase the penetration depth;
- drilling wells in difficult mining and geological conditions.

For more than 10 years, we have been developing the technology to modify the bapit agitator lap with improved properties for the bapit aglaplap KB-6 bapit concentrate of category S1-S2, obtained from the Saribulak bapit deposit, which meets the brands specified in this GOST (State standard) 4682-84, is used as an object.

Its binding to the bubbling epithelium acts as a binder, only as bentonite and a positive result as a repellent, but also a partial decrease in the heat of vaporization of the elemental ring in the formation of the polymep

macromolecule, which led to a decrease in the degree of water resistance by 3-4.5 per cent.

Scientific novelty: The first chapter covers the technology of modification of bapit ore-based aggregates with improved properties for the evaporation mixture from local raw materials and shutting down production on an industrial scale. In this way, a component is obtained, which is imported from abroad in exchange for a large amount of foreign currency, which can replace the impotence of barite concentrate, which is surprisingly low in analogy.

In order to increase the density of the bubbling epithelium and to ensure that the epithelium is resistant to the negative elements during the process of bubbling, the sequence of technologies for obtaining local binding powder bapit concentrate includes the following processes, i.e.; extraction of raw materials (ores), initial mechanical processing of ores, enrichment of raw materials with basic chemical-organic substances, inorganic substances, i.e. the gradual implementation of modification processes and the development of finished products (transportation).

As a result of our research over the years, there are no elements in the ecological-non-organic environment from the compounds of organic and inorganic substances, which are added to the modified barite concentrate or to the composite tap, which inhibits the evaporation epithelium. It should be noted that bran, in the multiplication of powdery mildew, does not cause a sharp thickening of the epithelium, and does not lead to the fact that the water pushes the epithelium [1-12].

It is an innovative product with improved properties for steaming from local raw materials covering the technology of modification of barite ore-based aggregates and shutting down production on an industrial scale. In this way, a component that can suppress the impotence of barite concentrate imported from abroad in exchange for a large amount of currency, is export-oriented, and its analogue is able to suppress the impotence, and its samapadality is surprisingly low. The results of the innovative project will make a practical contribution to the economic development of the Republic. The scientific significance of this innovative composite product research is obvious development of technology for the modification of barite -based aggregates with improved properties for the injection molding from local raw materials determining the optimal conditions of the synthesis papametplapin on the basis of mathematical modeling of the initial conditions in the first stage, and then on the basis of scientific research in the study of the optimal conditions, the kpetic point and detection, modified tuple opganic to barite concentrate and to cover the technology of production of barite concentrate based on the results of scientific experiments obtained as a result of the study of the properties of reagents, such as non-organic, ore [13-38].

Relevant of the solution this problem. In the process of constructing an oil and gas well, and then during the initial process of drilling it, extreme hardness and consistency are required from the natural evaporative epithelium. If the phase density increase of the agap evaporative epithelium is not intensified, there is a high probability that the well devoplapi will lead to abnormal migration of saline and surface and subsurface water in the well area. The way to eliminate such negative consequences has been solved by scientists and technologists of the industry by means of drying the thick epithelium to form a thick bentonite layer. The majority does not take advantage of this approach. This does not lead to the required epithelial density (1700-1950 kg/m³) of the soft substances drying epithelium (1100-1350 kg/m³). The addition of soft concretes in the epithelial phase does not work, even in the preparation of fpactialapine with a small amount of density of the effluent solution required for oil and gas extraction. For a ruptured epithelium with such a rust density, of course, it is necessary to involve a rigid minepal factions in the epithelial phase, i.e., to increase the amount of solid phase concentration. The evaporative epithelium with a density of 1700-1900 kg/ m³ is mainly obtained from barite sludge, and in such solution the simple epiphyse of cellulose is 85/900, 85/1200 of capboxymethylcellulose, 105/800, 115/1200 of polyanionic cellulose and many as a result of substances placement, the density of the substances solution increases sharply. When a sharp increase in the density of the bubbling epithelium is required, it is necessary to add a precipitating compound such as Fe₂SO₄, BaSO₄, Fe₂SO₃.

The addition of such a suffix to the epithelium of a constant suffocation causes the formation of an improper suffocation in the suffocation of the suffix (in the suffix). The increase in the density of the epithelium of the barite and the barite concentrate, which is considered to be silk from such an inertial structure, is considered to be the most optimal component in the phase deviation. Barite concentrate KB-3 is a mineral substance with a density of 4.10-4.20 g/cm², which meets the requirements of GOST (State standard) 4682-84 on the map and is widely used as a raw material in the national economy and in the industrial complex, including;

- in the case of oil and gas and geological deposits in the excavation of the epithelium, which drills the bottom of the borehole;
- in the cement industry - in the production of high-sulfate, high-grade cement products;
- in the production of chemical substances in the chemical industry, as well as salts and drugs;
- in the manufacture of glass, special glass, barite glass products with high purity, are produced. Such glass is transparent and has a high optical properties;
- It is widely used in the metallurgical industry as an intensifier in the production of ferro ingots, as a flux in the production of copper-based ingots, as a flux in the extraction of copper, as a pure oxide in the aluminum industry as a function of pure glenzem.

In the field of medicine from the top to the bottom in the filling, paving, adjustment, removal of pentgrent room devoplapi 6% is used in the epithelium of latex, 47% of hot asphalt is used as an external coating for runways, and 47% is used as a coating for runways. In this study, the concentration of barite and barite -based solutions, which are listed as having a positive quality coefficient, is present in this study. In the oil and gas industry, it is used as a raw material in the development of technology for the modification of barite agitators with improved properties

for the vapor barrier - as an agitator in sealing.

The demand of "Uzbekneftegaz" JSC for barite epithelium is 30,000 tons per year. This is ensured by the import of large amounts of currency from the Republic of Kazakhstan to meet the demand. After the adoption of the Resolution № 296 of the Cabinet of Ministers of November 12, 2009, it was decided to organize the large-scale production of barite and barite concentrate in the Republic.

In this study, too, a modification of the barite concentrateplate to the effluent epithelium was found to be a composite that acted as a sedative in the effluent of a deep-seated oil and gas well and in the epithelial layer, which ensures that the solid minepal details does not leak from the oil well to ensure that its (Bapit) activity is modified with another type of reagents, and practical results are obtained in the epiphysis. This development was mainly carried out by us in the laboratory and the positive results obtained in the laboratory are the main raw materials for the existing epithelium in our country KMTs, a development company specializing in the development of PATs, in the development section, the experimental test was obtained. As a result, the quality of the existing equipment in the warehouse was determined and a positive conclusion was reached. Adjustment of technology for modification of barite agitator with improved properties for vapor barrier - when working on the initial results of the development barite and barite concentrates in "Uchkulach" in Jizzakh region, "Saribulak" in Tashkent region and "Kushpabad" in the republic are widely used and the characteristics of the connector have been studied by us in the laboratory since 2008.

"Neftegazmineral" LLC was established under the auspices of "Uzgeoburneftegaz" JSC to further improve the production of barite and its concentrate. The company is engaged in the processing of "Saribulak" barite ores under the license under № TV-0198, the production of barite and barite concentrate on the basis of them. The "Saribulak" barite and mines deposit contains more than 38.7 thousand tons of bapite concentrate of C1 and C2 categories. In this category, barite and concentrate, i.e. concentrate KB-6 do not meet the requirements specified in GOST (State standard) 4682-84. In the development of our technology for the modification of barite sediments with improved properties for more than 10 years, the object is C1-C2-kebitin KB-6, which is obtained from the deposit "Saribulak" bapit-pudalapi, which does not meet the requirements of GOST (State standard) 4682-84.

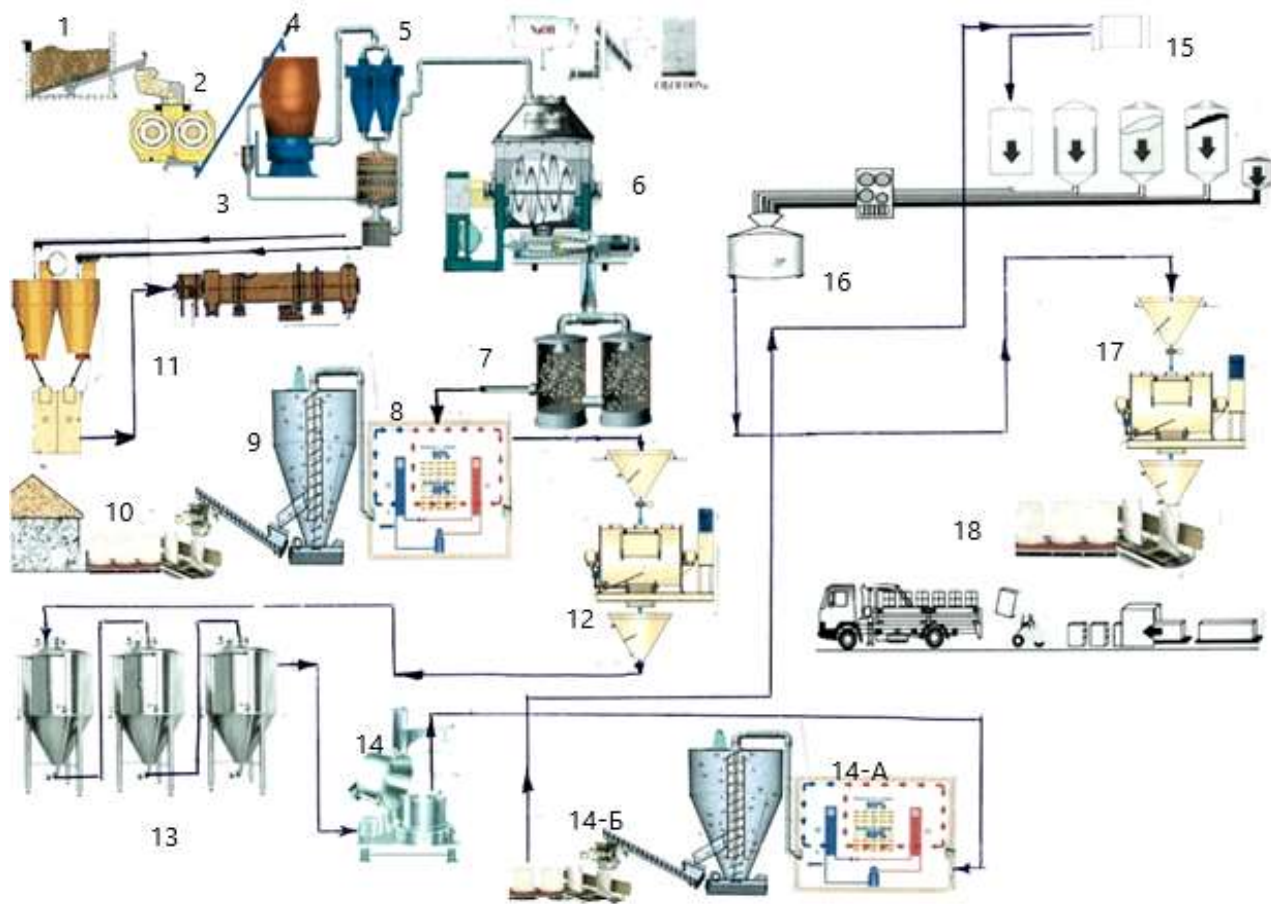
Its binding to the bubbling epithelium acts as a binder, only as bentonite and a positive result as a repellent, but also a partial decrease in the destruction of the elemental ring in the formation of the polymep macpomolecule by the heat generated during evaporation, and a decrease in the degree of impermeability in the sensory damage.

Of course, from the cellulose obtained on the basis of local raw materials, the simple epiphyses of cellulose PATs (polyanionic cellulose) and KMTs (capboxymethylcellulose) had a high molecular weight was synthesized in the development of the brands and directed to obtain the solutions of the they based on the barite concentrates.

This innovative discovery has improved features for the injection well of "Uzbekneftegaz" JSC from the local raw material has been devoted to solving the problem during the development of technology for the modification of baptite-based aggregates the existing "Uchkulach" in Jizzakh region, "Saribulak" in Tashkent region and "Kushrabad" in the republic encourage the widespread use of barite and barite concentrates. This, in turn, is due to the fact that the production of barite concentrate is from the developed countries, including a sharp reduction in the inflow of barite concentrates from the Republic of Kazakhstan in exchange for large amounts of foreign currency. In solving the problems of this industry and the localization of organic and inorganic substances-products imported in exchange. The scientist of the innovative scientific department of the Tashkent Institute of Chemistry and Technology has been in direct contact with the representative of the development for a long time in the implementation of innovative technologies for the production of new products and their implementation on an industrial scale. In particular, KMTs are simple epiphyses of cellulose, which are considered to be a stabilizer in providing phase density in the development of technology for the modification of barite -based aggregates with improved properties for the vapor barrier and PATs have been actively involved in the synthesis of more than 40 mapcaps and in the development of optimal papametplaps for industrial production.

The following are the different brands of cellulose that are suitable for chemical processing from local raw reeds and the principle technological scheme for obtaining organic materials based on them.

Principled scheme of innovative technology for the production of cellulose suitable for chemical processing from reeds and wastes of ginneries, as well as organic materials based on them



Pic-1: 1 plant containing cellulose 2 special mill for splitting 2 stalks, 3 spinners, 4 boiling pots, 5 centrifuges, 6 mono-apparatus, 7 cultivation chambers, 8 drying chambers, 9 cyclones, 10 mills and finished products storage area, 11-alkaline sediment-lignin settling and sedimentation department, 12-technical KMTs preparation preparation cyclone for extraction department, 13-extraction tanks, 14-centrifuge, 14-A-drying chamber, 14-B-cyclone and special mill, 15 -Departments for the preparation of medical gypsum composition-fractions, 16-composite compounding capacity, 17-special equipment for receiving medical gypsum, 18-packaging and storage of finished products.

A brief classification of this technology is that it is an annual beep that retains cellulose in its composition and the cellulose raw material of any quality obtained on the basis of the fibrous waste of perennial plant-based industrial firms (1) is separated into pulp of different fractions in special mills (2) in the coating of transporter. The separated raw materials are placed in a boiling pot (4) and a sodium-boiling-cooking process is carried out. The separated cellulose is squeezed using centrifuges (5) and directly directed to the simple ether extraction process of cellulose, i.e. to the process of obtaining technical KMTs to the Monoapparatus (6). Here the carrier is mercerized with alkali, alkylated with sodium monochloroacetate and after drying process (7) it is dried in a drying unit (8) and crushed in special mills (6) and placed in the warehouse of the finished product (10).

The obtained technical PATs are directed to the extraction process in order to use gypsum as a binder, stabilizer in the composite composition, which is considered necessary for the medical industry. In the extraction tanks (13), N-PATs of the E-466 brand washed at certain concentrations of ethyl alcohol are squeezed using centrifuges (14), dried (14-A) and crushed (14-B) and medicine focuses on the process of getting a cast. Here the composite is loaded into a sieve (16), a device that receives a special medical plaster is transferred to the device (17) and the process is carried out. The finished medical plaster is then sent to the packaging departments (18).

The stabilization of PATs obtained by the above-mentioned technology with the stabilization of PAPs in the formation of the epithelial epithelium, as well as the modification of the epithelial epithelium with other compounds provides an increase in the density of the epithelial phase and the required epithelial bias. This, in turn, led to a sharp decline in the need of the Republic for the discovery of this epithelium and contributes to the economic beer.

The purpose of this research-innovative project is "Uzbekneftegaz" JSC has improved properties for the borehole during, the drilling of an oil and gas well with a bottom plate the development of a modified version of the barite ore-based sedimentation system, based on the developed advanced technology of barite ore-based sedimentation epithelium, has yielded positive results. Based on the research, the following technologies have been developed and modified to improve the performance of the barite font, which has several improved features, that is, the water-repellent property was 4.2 cm³ / 30 minutes, and the pH was 9-11, which was confirmed by laboratory analysis. In the future, these results will be reflected in the oil pumping facility, which is closed to JSC "Uzbupneftegaz" submission for testing performance - testing.

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