

Development of targeted cosmetic products based on clay / diatomite / vegetable raw composite materials

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A wide range of therapeutic and prophylactic properties of clay minerals creates the preconditions for their inclusion in cosmetics, in particular shampoos, in the development of new recipes. In the last few years, well-known cosmetic companies have introduced innovative developments-shampoos with clays, which, thanks to the presence of the latter, strengthen the hair follicles and prevent their brittleness and loss. To increase the effectiveness of the clays that are part of the shampoo, it is advisable to use their compositions with vitamins and other biologically active substances (BAS). Clay / diatomaceous earth / vegetable raw material samples were obtained by mechanochemical activation.

The release of chlorophylls A and B, and carotenoids from plant raw materials and composite materials was studied by UV spectroscopy. To assess the level of safety of the obtained materials there was used software product "Rana" - information system designed for storage and systematization of composition data and calculation of the development of cosmetics or fillers, determining their level of safety in terms of the composition of the final mixture. Safety is assessed on three indicators - Cancer, Developmental & Reproductive Toxicity, Allergies & Immunotoxicity. Composite materials based on clays and various biologically active substances are proposed. The hypoallergenicity of the studied systems has been confirmed. Kinetic studies of biologically active substances can be used as a factor in regulating the direction of the preventive action of shampoos.

References

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