THE USE OF AFTER-PRODUCTS OF PETROLEUM REFINING FOR SYNTHESIS OF SURFACE-ACTIVE AGENTS

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Traditional technology of surface-active agents producing is complex, multi-stage, with poor quality of obtained products and, in general, does not meet the requirements of ecological safety of chemical production. For the first time we developed the technology of surface-active agent obtaining on the base of such semifabricsates of refineries as the Acidol A-1 and ethylene diaminogen.

Petroleum acids being members of Acidol (mass percentage of petroleum acids in Acidol is 42) interacting with ethylene diamine are bounded up in corresponding salts of primary amines with complex system formation.

By mathematical simulation the optimal conditions for carrying out the reaction are selected.

Obtained surface-active agents were used in constitution of cooling lubricant for metals working.

Positive results of the investigation of these cooling lubricants gave possibility of the large scale application at mechanical-engineering enterprises for metal working by cutting, drilling, honing, and grinding.