CATALYST FOR DISPROPORTIONATION OF ROSIN

Description
IC-53-1 catalyst for disproportionation of gum rosin consists of palladium (up to 2 %) applied to a granular carbon support. Use of Sibunit mesoporous carbon material as the support and the original method of applying palladium ensure a high activity and selectivity of the catalyst.
Disproportionation of rosin is used to improve its properties by decreasing the fraction of acids with diene groups, which retard the copolymerization process. The process is carried out at a temperature of 180-240°C, a pressure of up to 0.4 MPa, and a load of rosin of ≈0.25.

Technical specifications
Pellet diameter 2-3 mm
Bulk density 0.5–0.65 kg/dm³
Ash content not more than 3 %

Technical appraisal and economic benefits
• high activity and selectivity,
• the durability is 4-6 times longer than that of analogs.

Application areas
For disproportionation of rosin, which is used as an emulsion stabilizer in synthetic rubber production, and also in soap production.
In high-temperature processes involving high-molecular compounds.

Development stage
Production of the catalyst has been launched.
The catalyst has been used at a number of plants in Russia.

Patent situation
A patent was granted in the Russian Federation (1996).

Commercial offers
Sale of licenses.
Catalyst supply.

Estimated cost
Price is to be negotiated.

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