

95-0034

The invention relates to the peroxide compounds, particularly to the mixture with cyclohexanone and cyclohexanol which are used for polymers obtaining.

The purpose consists in increasing the CHP content in the reaction productions. Obtaining of special CHP is carried out by liquid - phase oxidation of cyclohexane (CH) with molecular oxygen (MO) with presaturation of CH with MO at 20-40°C and a pressure of 15045 atm with the subsequent oxidation of CH with the solubilized into it oxygen at 160-190°C and a pressure of 20-60 atm.

The saturation of CH with oxygen is made in a cylindrical reactor by the diameter and length ratio of 1: (125-1000), the raw material feeding speed of 0,4-0,8 h⁻¹ and time of reaction mixture stay in the reactor for which will react 56-99,9% of solubilized oxygen. The process is carried out under a constant temperature or reduction of the temperature along the reactor length of 10-40°C. The process allows to obtain a special product with a selectivity according to the products sum of 94,1 - 97,5. The CHP part is 67,7 - 89%.