IBUPROFEN HARD DISPERSIONS RESEARCH WITH TRISAMIN AS THE HYDROPHILIC CARRIER

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We have studied phase equilibriums of some compositions of hard primary condenced ibuprofen and trisamin system, and the derived system phase equilibriums of formed compound (ibutris) with one of the parent material-trisamin. According to the differential scanning calorimetry data and the visual-highly thermal analysis, we have plotted the phase diagram of constitution. Correspondingly to the physicochemical interaction type, the system can be referred to the simple eutectics which can be realized in the following relation of ibutris: trisamin - 53:47 % in mass at the melting point 134 °C. In terms of ibuprofen, the indicated composition contains 33.4 % of trisamin in mass. It has been demonstrated that eutectic composition of «ibutris – trisamin» system has the following characteristics: the extreme solubility of ibuprofen (more than 200 times as much) and the substance's dissolution velocity (nearly 8 times as much) as compared with the similar properties of the pure ibuprofen.