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BUBBLES CHARACTERISTICS AND CONVECTIVE EFFECTS IN THE BINARY MIXTURES

Abstract

The anomaly effect in the boiling binary mixtures has been revealed. The parameters characterizing dynamics of bubbles in water mixture of ethyl spirit in the field of variable pressure lie between limiting values corresponding parameters for pure a component when pressure differences and accordingly a diffusion role are insignificant. At pressure difference increase along with thermal dissipation joins and diffusion dissipation. Thus speed collapse and bubble growth considerably above, than in corresponding pure components of a mixture under the same conditions. Absolutely other situation is observed at growth and collapse a steam bubble in water mixture ethylene glycol. In this case the effect diffusion the resistance leading to braking of speed of phase transformations is observed. Growth rate and collapse a bubble much less than corresponding values, but for pure components of a mixture.