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Investigation of not fully stable fluids by the method of controlled pulse heating. 3.

Attainable superheat of solutions with different types of critical curve

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## Highlights

- Attainable superheat of binary solutions in the course of pulse heating was studied. Spontaneous boiling-up signals appeared to be similar to those of pure components.
- They were confined in time and reproducible with respect to temperature.
- The relationship between critical curve and attainable superheat line was revealed.
- The impact of diffusion metastability on attainable superheat calls for close study.

## Abstract

The phenomenon of spontaneous bubble nucleation in extremely superheated binary solutions has been studied experimentally. The experiments were carried out by the pulse heating of a wire probe. Spontaneous boiling-up temperatures  $T^*$  for solutions composed of components of different chemical nature have been measured in a wide range of

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