On the efficiency of PT Flash calculations with equations of state - DTU Orbit (08/08/2019)

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The isobaric-isothermal equilibrium (PT Flash) calculation has been an active research topic in thermodynamics community for decades, of which the conventional framework consists of two subproblems: stability test and phase split calculation. In this work, various aspects on the efficiency of the conventional PT Flash calculation procedures have been investigated, which includes the significances of a few successive substitution steps before starting the second-order method and volume based methods for both PT stability test and PT Flash problems, as well as the use of advanced equations of state.

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