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DATABASE AND PROGRAM FOR DETERMINING THERMODYNAMIC PROPERTIES OF INDIVIDUAL SUBSTANCES

The paper focuses on databases and software products used for calculating the thermo-dynamic properties of individual substances. The authors present formulas for determining the substances thermo-dynamic functions on the basis of Gibbs reduced energy approximation equation coefficients. An algorithm for accounting the phase transitions is also proposed. Criteria for automatic verification of information have been determined to avoid errors related to incorrect data entry.

Keywords: database, thermodynamics, enthalpy, entropy, specific heat, Gibbs energy, verification criteria.

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