

BINODAL DIAMETER FOR ATOMIC  
AND MOLECULAR LIQUIDS  
IN TERMS OF ENTROPY

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S u m m a r y

The behavior of the diameter of a liquid–vapor coexistence curve has been studied in terms of the entropy  $S_d$  for various classes of liquids, namely, atomic, molecular, polar, and nonpolar ones. The research has been carried out by analogy with the studies of the parameter concerned in terms of the density. It has been shown that the behavior of  $S_d$  far from the critical point is governed by the rotational degrees of freedom and the excluded volume effect. An equation of state for relevant liquids which takes the indicated effects into account has been proposed.