

critical point

Point in the isobaric temperature-composition plane for a binary mixture where the compositions of all coexisting phases become identical.

Notes:

1. An alternative definition of “critical solution point” refers strictly to liquid-vapour equilibria.
2. Unless specified atmospheric pressure is assumed.
3. In a phase diagram, the slope of the tangent to the spinodal is zero at this point.
4. At a critical point, binodals and spinodals coincide.
5. Although the definition holds strictly for binary mixtures, it is often erroneously applied to multi-component mixtures.

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N.B. This supersedes an earlier definition.