metastability (of a phase)

A term that describes the state of a phase in which an energy barrier considerably higher than kT must be surmounted before this phase can transform to a phase of lower molar *Gibbs energy* and molar *Helmholtz energy*, where k is the *Boltzmann constant* and T the *thermodynamic temperature*.

Note:

In a thermodynamic sense, the equilibrium state is the state with the lowest molar Gibbs energy; a metastable state corresponds to a relative minimum in the molar Gibbs energy.

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