standard state

State of a system chosen as standard for reference by convention. Three standard states are recognized:

For a gas phase it is the (hypothetical) state of the pure substance in the gaseous phase at the *standard pressure* $p = p^{\circ}$, assuming ideal behaviour. For a pure phase, or a mixture, or a solvent in the liquid or solid state it is the state of the pure substance in the liquid or solid phase at the standard pressure $p = p^{\circ}$.

For a solute in solution it is the (hypothetical) state of solute at the standard molality m° , standard pressure p° or standard concentration c° and exhibiting infinitely dilute solution behaviour.

For a pure substance the concept of standard state applies to the substance in a well defined state of aggregation at a well defined but arbitrarily chosen standard pressure.

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