

## 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  $m^\circ$ , standard pressure  $p^\circ$  or standard concentration  $c^\circ$  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.

**Source:**

Green Book, 2nd ed., p. 53