

THERMODYNAMIC STATE VARIABLES

Equilibrium state

Every equilibrium state of a thermodynamic system is completely described by specific values of some **macroscopic** variables, also called state variables.

They are pressure, volume, temperature, and mass (and composition if there is a mixture of gases)

For an ideal gas, the equation of state is the ideal gas relation

$$P V = \mu R T$$

The pressure-volume curve for a fixed temperature is called an isotherm

