

Boyle's Law

At constant temperature, the volume of a fixed mass of gas is inversely proportional to its pressure.

Charles' Law

At constant pressure, the volume of a fixed mass of gas is directly proportional to its temperature measured on the Kelvin scale.

Combined (General)
Gas Law

$$\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$$

Standard temperature
and pressure (s.t.p.)

100,000 Pa and 273 K

Gay-Lussac's Law of Combining Volumes

In a reaction between gases, the volumes of the reacting gases and the volumes of any gaseous products are in the ratio of small whole numbers, provided that the volumes are measured at the same temperature and pressure.

Avogadro's Law

Equal volumes of gases contain equal numbers of molecules, under the same conditions of temperature and pressure.

Ideal gas

A gas that obeys all of the assumptions of the kinetic theory of gases under all conditions of temperature and pressure.

Equation of State for an Ideal Gas

$$pV = nRT$$

Volatile liquid

A liquid that vaporises easily.
