

Avogadro constant

The Avogadro constant, $N_A = 6.022\,140\,76 \times 10^{23} \text{ mol}^{-1}$, is a proportionality constant between the quantity amount of substance (n , with unit mole) and the quantity for counting entities (N with unit one, symbol 1), $N = N_A n$.

Notes:

1. In the revision of the International System of Units (SI) of 2019 the Avogadro constant became one of the seven defining constants with the exact value $6.022\,140\,76 \times 10^{23} \text{ mol}^{-1}$.
2. The Avogadro number is the exact numerical value of the Avogadro constant, $6.022\,140\,76 \times 10^{23}$.
3. While the symbol N_A is used to honour Amedeo Avogadro, the symbol L is used in honour of Josef Loschmidt.

Sources:

BIPM, Le Système international d'unités (SI), SI Brochure, 9^e ed. (2019), p. 17

BIPM, The International System of Units, SI Brochure, 9th ed. (2019), p. 129

Green Book, 3rd ed.

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