

In chemistry and physics, the Avogadro constant (symbols:  $L$ ,  $N_A$ ) is defined as the number of constituent particles (usually atoms or molecules) in one mole of a given substance. It has dimensions of reciprocal mol and its value is equal to  $6.02214129 \times 10^{23} \text{ mol}^{-1}$ . Changes in the SI units are proposed that will change the constant to exactly  $6.02214 \times 10^{23}$  when it is expressed in the unit  $\text{mol}^{-1}$

So if it is 2.50 mol of iron, the number of particles is next:

$N = N_A * n$ , where

$n$  is amount

$N_A$  is Avogadro constant

$N$  is number of particles, so

$$N = N_A * n = 6.02214 \times 10^{23} * 2.50 = 1.50554 \times 10^{24}$$