# ionic conductivity

Defined for ionic species B by

$$\lambda = |z_B| \, F \, u_B$$

where $z_B$ is the charge number of the ionic species B, $F$ is the Faraday constant, and $u_B$ is the electric mobility of species B. In most current practice $z_B$ is taken as unity, i.e. ionic conductivity is taken as that of species such as $Na^+$, $Ca^{2+}/2$, $La^{3+}/3$ etc. To avoid ambiguity the species considered should be clearly stated, e.g. as $\lambda(Ca^{2+}/2)$.

*Source:*
PAC, 1974, *37*, 499 *(Electrochemical nomenclature)* on page 512