

heterogeneous diffusion rate constant (in electrochemistry)

Defined by the equation:

$$k_d = I_l/nFcA$$

where the *limiting current* I_l is assumed to be due to the diffusion species of concentration c and of diffusion coefficient D . n is the *charge number of the cell reaction* written so that the stoichiometric coefficient of this species is unity. A is usually taken as the geometric area of the electrode, and F is the Faraday constant.

1974, 37, 513