$$dE = TdS - PdV + \mu dN$$

(dE: const; PdV: const)

$$\left(\frac{\partial S}{\partial N}\right)_{E,V} = -\frac{\mu}{T}$$

T same in both bodies

$\Rightarrow \mu_1 = \mu_2$ cond. for eq.

Chem. pot of bodies in contact (exchange part) are equal