

P & T constant

Air ($N_{\text{air}}, V_{\text{gas}}$) + water vapor ($N_{\text{vap}}, V_{\text{gas}}, x_{\text{vap}}$)

$N_{\text{liq},1}, V_{\text{liq},1}, A_{\text{liq},1}$

$x_{\text{liq},1}$

$N_{\text{liq},2}, V_{\text{liq},2}, A_{\text{liq},2}$

$x_{\text{liq},2}$