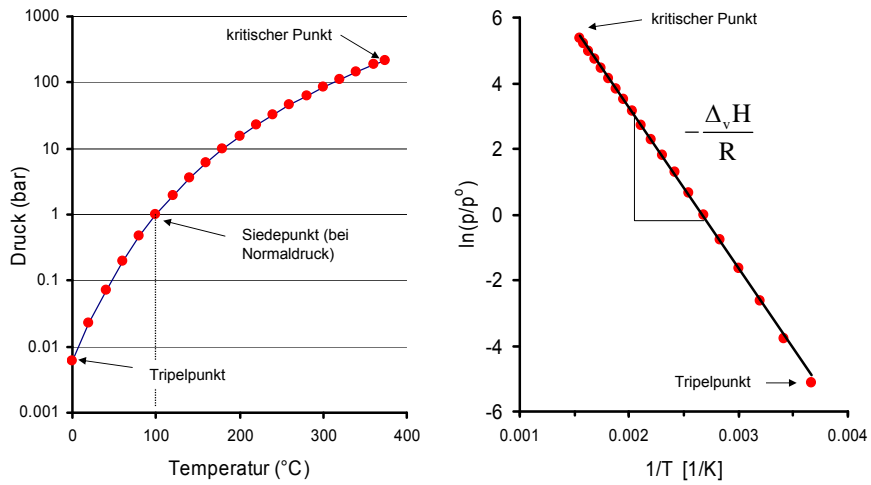
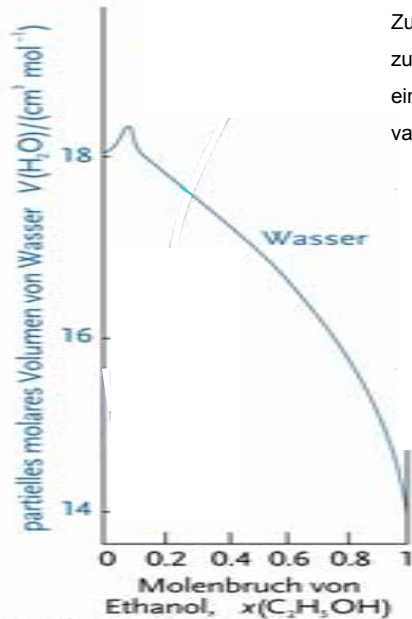
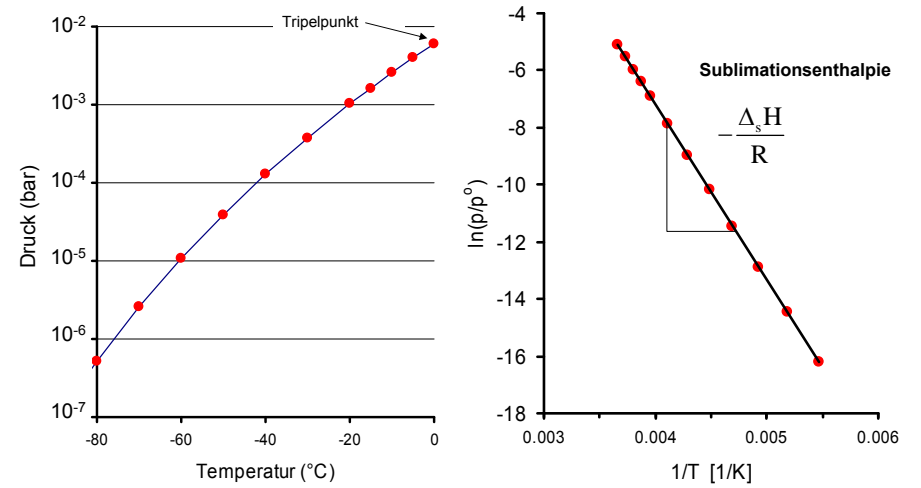


Dampfdruckkurve von Wasser

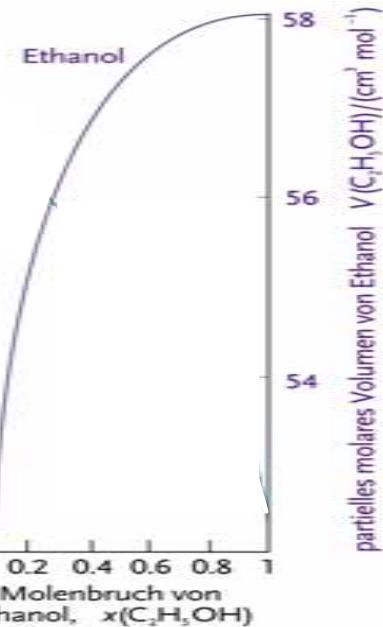


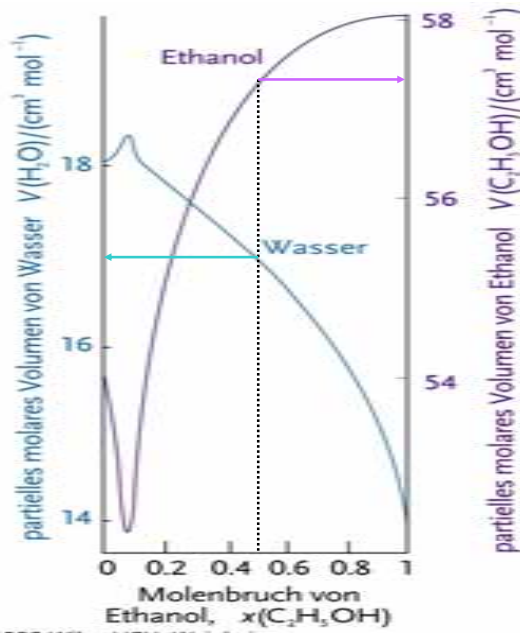
Dampfdruckkurve von Eis



Zugabe von ein Mol (18 ml) Wasser zu einem sehr (∞) großen Volumen einer Ethanol-Wasser-Mischung variabler Zusammensetzung

Zugabe von ein Mol (58 ml) Ethanol zu einem sehr (∞) großen Volumen einer Ethanol-Wasser-Mischung variabler Zusammensetzung

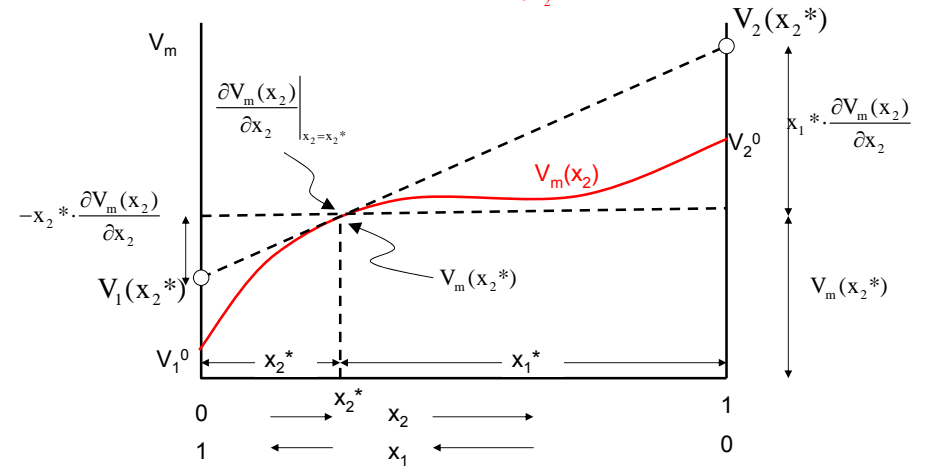




© 2006 Wiley-VCH, Weinheim
 Atkins / Physikalische Chemie
 ISBN: 3-527-31546-2 Abb-05-01

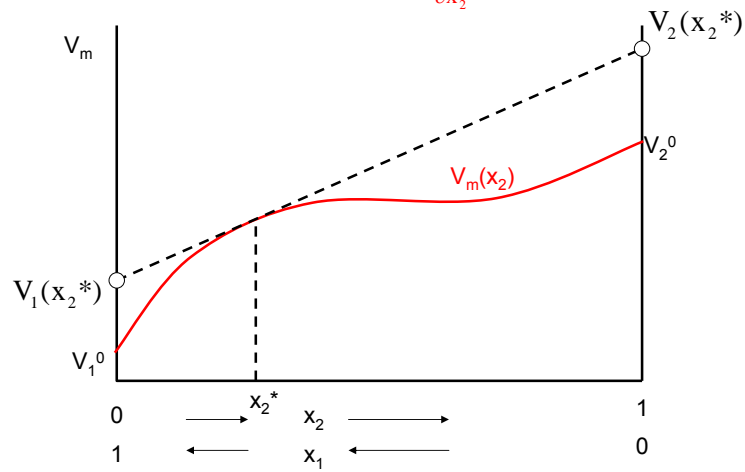
$$V_2(x_2) = V_m(x_2) + x_1 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$

$$V_1(x_2) = V_m(x_2) - x_2 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$



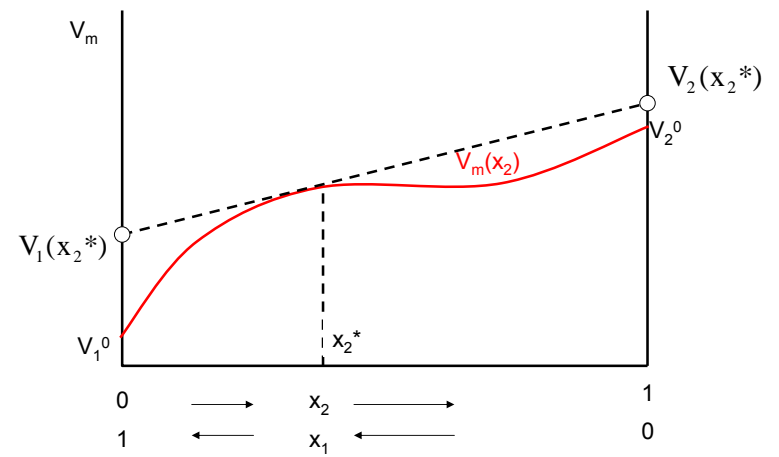
$$V_2(x_2) = V_m(x_2) + x_1 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$

$$V_1(x_2) = V_m(x_2) - x_2 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$



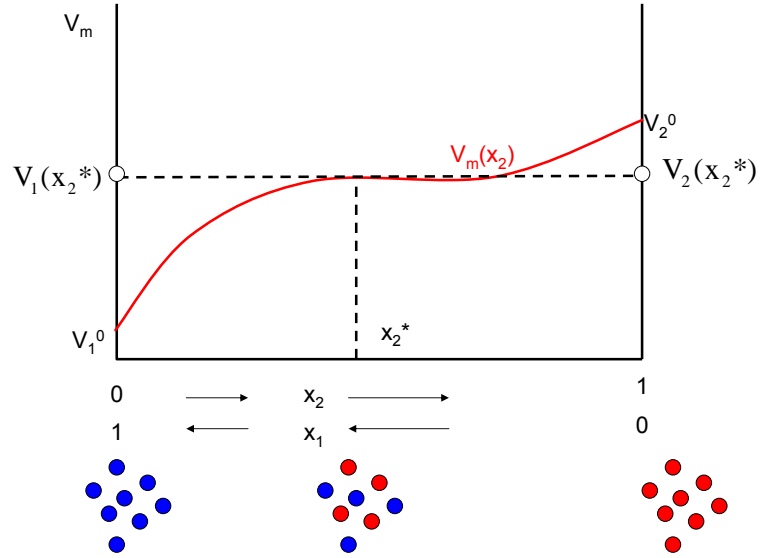
$$V_2(x_2) = V_m(x_2) + x_1 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$

$$V_1(x_2) = V_m(x_2) - x_2 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$



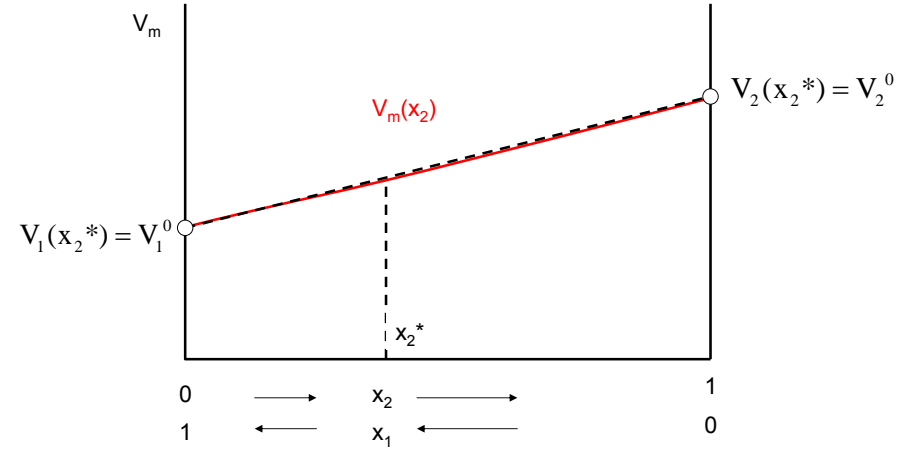
$$V_2(x_2) = V_m(x_2) + x_1 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$

$$V_1(x_2) = V_m(x_2) - x_2 \cdot \frac{\partial V_m(x_2)}{\partial x_2}$$



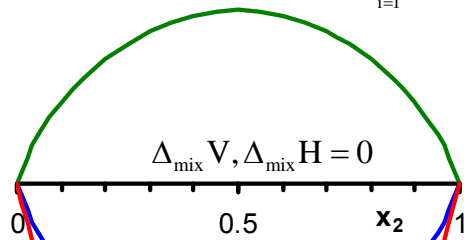
Ideale Mischung:

(Bsp.: Hexan/Heptan, Benzol/Toluol, H₂O/D₂O)



Ideale Mischung

$$\Delta_{\text{mix}} S_m = -R \cdot \sum_{i=1}^k x_i \cdot \ln x_i$$



$$\Delta_{\text{mix}} G_m(T_1)$$

$$\Delta_{\text{mix}} G_m(T_2)$$

$$\Delta_{\text{mix}} G_m = R \cdot T \cdot \sum_{i=1}^k x_i \cdot \ln x_i$$

$$T_1 < T_2$$

Reale Mischung:

