

List of Symbols

$A \text{ (cm}^2\text{)}$	Area
$a \text{ (cm}^2\text{)}$	Capillary area
$C_p \text{ (J/g } ^\circ\text{C)}$	Specific heat
$D \text{ (cm}^2\text{/s)}$	Diffusion coefficient
$h \text{ (cm)}$	Height of mercury slug
$J \text{ (cm}^3\text{(STP)/cm}\cdot\text{s)}$	amount of gas flux
$l \text{ (cm)}$	Membrane thickness
$P \text{ (barrer)}$	Permeability coefficient
ΔP	Pressure difference across the membrane
P_1	Downstream pressure
P_2	Upstream pressure
P_{atm}	Atmospheric pressure
$R \text{ (cmHg}\cdot\text{cm}^3\text{/cm}^3\text{(STP)}^\circ\text{K)}$	Universal gas constant
$S \text{ (cm}^3_{\text{gas}}\text{(STP)/cm}^3_{\text{polymer}}\cdot\text{cmHg)}$	Solubility coefficient
$T \text{ (}^\circ\text{C or }^\circ\text{K)}$	Temperature
$V \text{ (cm}^3\text{)}$	Volume
$\theta \text{ (s)}$	Time lag
α	Separation factor