

$$K_{eq} = \frac{\text{Moles/liter (vapor)}}{\text{Moles/liter (aqueous)}}$$

	10 <sup>2</sup>	
Alkanes	10	CH <sub>3</sub> — CH <sub>3</sub>
Alkenes		CH <sub>2</sub> = CH <sub>2</sub>
Alkynes	1	CH = CH
Thiols	10 <sup>-1</sup>	C <sub>2</sub> H <sub>5</sub> — SH
Chlorides		C <sub>2</sub> H <sub>5</sub> — Cl
Thioethers, ethers		CH <sub>3</sub> — S — CH <sub>3</sub>
		CH <sub>3</sub> — O — CH <sub>3</sub>
Esters	10 <sup>-2</sup>	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{O} - \text{CH}_3 \end{array}$
Aldehydes	10 <sup>-3</sup>	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{H} \\   \\ \text{CH}_3 \end{array}$
Ketones		$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{CN} \end{array}$
Nitriles		
Amines	10 <sup>-4</sup>	C <sub>2</sub> H <sub>5</sub> — NH <sub>2</sub>
Alcohols		C <sub>2</sub> H <sub>5</sub> — OH
Water	10 <sup>-5</sup>	H <sub>2</sub> O
Acids		$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{OH} \end{array}$
Phosphotriesters	10 <sup>-6</sup>	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{N}(\text{CH}_3)_2 \end{array} \quad (\text{CH}_3\text{O})_3\text{P} = \text{O}$
Amides	10 <sup>-7</sup>	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{NH}_2 \end{array}$
Diols		$\begin{array}{c} \text{CH}_2\text{OH} \\   \\ \text{CH}_2\text{OH} \end{array}$
Peptides		$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3 - \text{C} - \text{NH}(\text{CH}_3) \end{array}$