

APPENDIX I

Ionization Constants of Weak Bases

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Base	Lewis Structure	K_b at 25 °C
ammonia	$\begin{array}{c} \text{H} - \overset{\cdot\cdot}{\text{N}} - \text{H} \\ \\ \text{H} \end{array}$	1.8×10^{-5}
dimethylamine	$\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H} - \text{C} - \overset{\cdot\cdot}{\text{N}} - \text{C} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	5.9×10^{-4}
methylamine	$\begin{array}{c} \text{H} \\ \\ \text{H} - \text{C} - \overset{\cdot\cdot}{\text{N}} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	4.4×10^{-4}
phenylamine (aniline)	$\begin{array}{c} \text{H} \\ \\ \text{H} - \text{C} - \text{C} = \text{C} - \text{H} \\ \quad \\ \text{H} - \text{C} - \text{C} = \text{C} - \text{H} \\ \\ \text{H} - \overset{\cdot\cdot}{\text{N}} - \text{H} \end{array}$	4.3×10^{-10}
trimethylamine	$\begin{array}{c} \text{H} \\ \\ \text{H} - \text{C} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \\ \quad \\ \text{H} - \text{C} - \overset{\cdot\cdot}{\text{N}} - \text{C} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	6.3×10^{-5}

TABLE I1