

Conversion Factors

<u>1 kJ mol⁻¹</u>	<u>1 kcal mol⁻¹</u>
2.3901 X 10 ⁻¹ kcal mol ⁻¹	4.1840 kJ mol ⁻¹
1.0364 X 10 ⁻² eV atom ⁻¹	4.3364 X 10 ⁻² eV atom ⁻¹
8.3593 X 10 cm ⁻¹	3.4976 X 10 ² cm ⁻¹
2.5061 X 10 ⁶ MHz	1.0486 X 10 ⁷ MHz

<u>1 cm⁻¹</u>	<u>1 MHz</u>
1.1963 X 10 ⁻² kJ mol ⁻¹	3.9903 X 10 ⁻⁷ kJ mol ⁻¹
2.8592 X 10 ⁻³ kcal mol ⁻¹	9.5370 X 10 ⁻⁸ kcal mol ⁻¹
1.2399 X 10 ⁻⁴ eV atom ⁻¹	4.1357 X 10 ⁻⁹ eV atom ⁻¹
2.9979 X 10 ⁴ MHz	3.3356 X 10 ⁻⁵ cm ⁻¹

<u>1 eV atom⁻¹</u>
9.6485 X 10 kJ mol ⁻¹
2.3060 X 10 kcal mol ⁻¹
8.0655 X 10 ³ cm ⁻¹
2.4180 X 10 ⁸ MHz

Mössbauer spectra: $E_{\nu}({}^{57}\text{Fe}) = 14.413 \text{ keV}$

<u>1 nm s⁻¹</u>
4.639 X 10 ⁻⁶ kJ mol ⁻¹
1.109 X 10 ⁻⁶ kcal mol ⁻¹
4.808 X 10 ⁻⁸ eV atom ⁻¹
3.878 X 10 ⁻⁴ cm ⁻¹
1.162 X 10 MHz

For other Mössbauer nuclides, multiply the above conversion factors by $E_{\nu}(\text{keV})/14.413$

