

Conversion Factors

1 kJ mol⁻¹

2.3901 x 10⁻¹ kcal mol⁻¹
1.0364 x 10⁻² eV atom⁻¹
8.3593 x 10 cm⁻¹
2.5061 x 10⁶ MHz

1 kcal mol⁻¹

4.1840 kJ mol⁻¹
4.3364 x 10⁻² eV atom⁻¹
3.4976 x 10² cm⁻¹
1.0486 x 10⁷ MHz

1 cm⁻¹

1.1963 x 10⁻² kJ mol⁻¹
2.8592 x 10⁻³ kcal mol⁻¹
1.2399 x 10⁻⁴ eV atom⁻¹
2.9979 x 10⁴ MHz

1 MHz

3.9903 x 10⁻⁷ kJ mol⁻¹
9.5370 x 10⁻⁸ kcal mol⁻¹
4.1357 x 10⁻⁹ eV atom⁻¹
3.3356 x 10⁻⁵ cm⁻¹

1 eV atom⁻¹

9.6485 x 10 kJ mol⁻¹
2.3060 x 10 kcal mol⁻¹
8.0655 x 10³ cm⁻¹
2.4180 x 10⁸ MHz

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

1 mm s⁻¹

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