

Energy Conversion Factors

$$\mathbf{k \cdot T}_{295 \text{ K}} = 205.04 \text{ cm}^{-1} \quad 0.025421 \text{ eV} \quad 4.0729 \cdot 10^{-21} \text{ J} \quad 2.4528 \text{ kJ/mol}$$

	$(\lambda_{\text{nm}})^{-1}$	cm^{-1}	eV	J	kJ/mol	THz	Hartree
$(\lambda_{\text{nm}})^{-1}$	1	$1 \cdot 10^{-7}$	$1.2398 \cdot 10^3$	$1.9864 \cdot 10^{-16}$	$1.1963 \cdot 10^5$	$2.9979 \cdot 10^5$	45.563
cm^{-1}	$1 \cdot 10^7$	1	$1.2398 \cdot 10^{-4}$	$1.9864 \cdot 10^{-23}$	0.011963	0.029979	$4.5563 \cdot 10^{-6}$
eV	$8.0655 \cdot 10^{-4}$	8065.5	1	$1.6022 \cdot 10^{-19}$	96.485	241.80	0.036749
J	$5.0341 \cdot 10^{15}$	$5.0341 \cdot 10^{22}$	$6.2415 \cdot 10^{18}$	1	$6.0221 \cdot 10^{20}$	$1.5092 \cdot 10^{21}$	$2.2937 \cdot 10^{17}$
kJ/mol	$8.3593 \cdot 10^{-6}$	83.593	0.010364	$1.6605 \cdot 10^{-21}$	1	2.5061	$3.8088 \cdot 10^{-4}$
THz	$3.3356 \cdot 10^{-6}$	33.356	$4.1357 \cdot 10^{-3}$	$6.6261 \cdot 10^{-22}$	0.39903	1	$1.5198 \cdot 10^{-4}$
Hartree	0.021947	$2.1947 \cdot 10^5$	27.211	$4.3597 \cdot 10^{-18}$	2625.5	$6.5797 \cdot 10^3$	1

All entries in each row are equal.

λ_{nm}	cm^{-1}	eV	J	kJ/mol	kcal/mol	THz	h ν /J
25000	400	0.04959	$7.946 \cdot 10^{-21}$	4.785	1.144	11.99	$1.259 \cdot 10^{20}$
12398	806.6	0.1000	$1.602 \cdot 10^{-20}$	9.649	2.306	24.18	$6.242 \cdot 10^{19}$
10000	1000	0.1240	$1.986 \cdot 10^{-20}$	11.96	2.859	29.98	$5.034 \cdot 10^{19}$
2500	4000	0.4959	$7.946 \cdot 10^{-20}$	47.85	11.44	119.9	$1.259 \cdot 10^{19}$
1240	8065	1.000	$1.602 \cdot 10^{-19}$	96.47	23.06	241.8	$6.242 \cdot 10^{18}$
1000	10000	1.240	$1.986 \cdot 10^{-19}$	119.6	28.59	299.8	$5.034 \cdot 10^{18}$
800	12500	1.550	$2.483 \cdot 10^{-19}$	149.5	35.74	374.7	$4.027 \cdot 10^{18}$
700	14286	1.771	$2.838 \cdot 10^{-19}$	170.9	40.84	428.3	$3.524 \cdot 10^{18}$
600	16667	2.066	$3.311 \cdot 10^{-19}$	199.4	47.65	499.7	$3.020 \cdot 10^{18}$
500	20000	2.480	$3.973 \cdot 10^{-19}$	239.3	57.18	599.6	$2.517 \cdot 10^{18}$
400	25000	3.100	$4.966 \cdot 10^{-19}$	299.1	71.48	749.5	$2.014 \cdot 10^{18}$
300	33333	4.133	$6.621 \cdot 10^{-19}$	398.8	95.30	999.3	$1.510 \cdot 10^{18}$
200	50000	6.199	$9.932 \cdot 10^{-19}$	598.1	143.0	1499	$1.007 \cdot 10^{18}$
100	100000	12.40	$1.986 \cdot 10^{-18}$	1196	285.9	2998	$5.034 \cdot 10^{17}$

All entries in each row are equal.