

# Important steric interactions and their relative energies

CHEM304

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Data from [http://www.cpp.edu/~psbeauchamp/pdf/201\\_extra\\_conform\\_probs.pdf](http://www.cpp.edu/~psbeauchamp/pdf/201_extra_conform_probs.pdf)

Table 1: Approximate Eclipsing Energies (kcal/mol)

	H	Me	Et	iPr	<i>t</i> -Bu	Ph
H	1.0	1.4	1.5	1.6	3.0	1.7
Me	1.4	2.5	2.7	3.0	8.5	3.3
Et	1.5	2.7	3.3	4.5	10.0	3.8
iPr	1.6	3.0	4.5	7.8	13.0	8.1
<i>t</i> -Bu	3.0	8.5	10.0	13.0	23.0	13.5
Ph	1.7	1.7	3.8	8.1	13.5	8.3

Table 2: Approximate Gauche Energies (kcal/mol)

	H	Me	Et	iPr	<i>t</i> -Bu	Ph
H	0.0	0.0	0.1	0.2	0.5	0.2
Me	0.0	0.8	0.9	1.1	2.7	1.4
Et	0.1	0.9	1.1	1.6	3.0	1.5
iPr	0.2	1.1	1.6	2.0	4.1	2.1
<i>t</i> -Bu	0.5	2.7	3.0	4.1	8.2	3.9
Ph	0.2	1.4	1.5	2.1	3.9	2.3