

Bond length and bond energy:

	Length (Å)	Energy (kcal/mol)		Length (Å)	Energy (kcal/mol)
C-H	1.1	98	C-O	1.4	79
C-C	1.5	81	C=O	1.2	173
C=C	1.3	145	C-N	1.48	66
C≡C	1.2	198	C=N	1.35	154
			C≡N	1.25	224
H-H		103	H-Cl		102
C-Cl		84	H-Br		87
C-Br		70	H-I		71
C-I		56	H-O		109
Cl-Cl		57	H-N		92
Br-Br		45	C≡N		225
I-I		36			
O-O		34			