



CHE1031: Bond energies and lengths

bond	kJ/mol	bond	kJ/mol	bond	kJ/mol
H-H	436	C-S	260	F-Cl	255
H-C	415	C-Cl	330	F-Br	235
H-N	390	C-Br	275	Si-Si	230
H-O	464	C-I	240	Si-P	215
H-F	569	N-N	160	Si-S	225
H-Si	395	N=N	418	Si-Cl	359
H-F	320	N=N	946	Si-Br	290

bond	length (Å)	energy (kJ/mol)
C-C	1.54	345
C=C	1.34	611
C≡C	1.20	837
C-N	1.43	290
C=N	1.38	615
C≡N	1.16	891
C-O	1.43	350
C=O	1.23	741
C≡O	1.13	1080