

# Data sheet 3

## Bond energies

### (a) Diatomic molecules

Bond	Energy / kJ mol <sup>-1</sup>
H-H	436
D-D	442
N≡N	994
O=O	496
F-F	158
Cl-Cl	244
Br-Br	193
I-I	151
H-F	562
H-Cl	431
H-Br	366
H-I	299

### (b) Polyatomic molecules

Bond	Energy / kJ mol <sup>-1</sup>
C-C	350
C=C	610
C≡C	840
C <sup>∞</sup> -C (benzene)	520
C-H	410
C-Cl	340
C-Br	280
C-I	240
C-O	360
C=O	740
C-N	305
C=N	610
C≡N	890
N-H	390
N-N	160
N=N	410
O-H	460
O-O	150
Si-Cl	359
Si-H	320
Si-O	444
Si-Si	222
S-Cl	250
S-H	347
S-S	264