

## Experimental Data for Molecules with Oxygen-Oxygen Bonds

Molecule	Oxygen-Oxygen Bond Order	Bond Length (Å)	BDE (kJ/mol)
HO-OH	1	1.48	214
O <sub>3</sub>	1.5	1.28	296
O <sub>2</sub>	2	1.21	498

**For a given pair of atoms, increasing bond order leads to shorter and stronger bonds.**