

Intermolecular Forces

1. Dipole-Dipole forces: attraction between oppositely charged ends of polar molecules.
2. Dipole-Ion forces: attraction between an ion and the slightly charged end of a polar molecule.
3. Hydrogen Bonding: attraction between highly polar molecules containing H-F, H-O and H-N bonds.
4. London Dispersion forces: attractive force between two molecules based on size. (The larger the molecule the greater the attraction)

The stronger the intermolecular forces present between molecules, the higher the melting point and boiling point of the substance.

$$\text{LDF} < \text{DDF} < \text{HB}$$