Name : Fluorine

Symbol : F

Atomic number (Z) : 9

Atomic mass : 18.998403163

Group : 17

Period : 2

block : p

Color : Colorless

Phase :gas

Oxidation states : -1

Electronegativity : Pauling scale: 3.98

Melting point : 53.48 K (-219.67 °C, -363.41 °F)

Boiling point : 85.03 K (-188.11 °C, -306.60 °F)

Density at stp : 1.696 g/L

Triple point : 53.48 K, 90 kPa

Critical point : 144.41 K, 5.1724 MPa

Heat of fusion : 0.26 kj/mol

Heat of vaporization : 6.51 kJ/mol

Molar heat capacity : Cp: 31 J/(mol•k) (at 21.1 °C)

Cv: 23 J/(mol•K) (at 21.1 °C)

Ionization energies : 1st: 1681 kJ/mol

Covalent radius : 64 pm

Van der Waals radius : 135 pm

Speed of sound :

Crystal structure : cubic

Magnetic ordering : diamagnetic

Discovery : André-Marie Ampère (1810)

Named by : Humphry Davy