

PHYSICAL PROPERTIES OF GROUP 17 ELEMENTS

Property	Fluorine	Chlorine	Bromine	Iodine	Astatine
Physical state at 293 K	Gas	Gas	Liquid	Solid	Solid
Atomic Number	9	17	35	53	85
Isotopes	^{19}F	^{35}Cl , ^{37}Cl	^{79}Br	^{127}I	^{210}At , ^{211}At
Atomic Mass (g.mol ⁻¹ at 293 K)	18.99	35.45	79.9	126.9	210
Electronic configuration	$[\text{He}]2s^2 2p^5$	$[\text{Ne}]3s^2 3p^5$	$[\text{Ar}]3d^{10} 4s^2 4p^5$	$[\text{Kr}]4d^{10} 5s^2 5p^5$	$[\text{Xe}] 4f^{14} 5d^{10} 6s^2 6p^5$
Atomic radius (Å)	1.47	1.75	1.85	1.98	2.02
Density (g.cm ⁻³ at 293 K)	1.55×10^{-3}	2.89×10^{-3}	3.10	4.93	-
Melting point (K)	53	171	266	387	573
Boiling point (K)	85	239	332	457	623