

OVERVIEW	
Full Name	Zinc (None)
Symbol	Zn
Atomic Number	30
Series	Transition Metal
Block / Group / Period	d-block Group 12 Period ...
Electron Config.	[Ar]4s23d10
Phase at STP	Solid
Colour	SlateGray
Discovery	1500 in Germany

THERMAL PROPERTIES	
Melting Point	419.53 °C °C
Melting Point (abs.)	692.68 K K
Boiling Point	907 °C °C
Boiling Point (abs.)	1180 K K
Heat of Fusion	7.35 kJ/mol kJ/mol
Heat of Vaporization	119 kJ/mol kJ/mol
Specific Heat (solid)	388 J/(kg K) J/(kg·K)
Thermal Conductivity	120 W/(m K) W/(m·K)
Thermal Expansion	0.0000302 K ⁻¹ K ⁻¹

MECHANICAL PROPERTIES	
Density (solid, STP)	7.14 g/cm ³ g/cm ³
Density (liquid, MP)	6.57 g/cm ³ g/cm ³
Young's Modulus	108 GPa GPa
Shear Modulus	43 GPa GPa
Bulk Modulus	70 GPa GPa
Poisson's Ratio	0.25
Speed of Sound	3700 m/s m/s
Mohs Hardness	2.5
Brinell Hardness	412 MPa MPa

ELECTRICAL PROPERTIES	
Type	Conductor
Conductivity	1.7×10 ⁷ S/m S/m
Resistivity	5.900000000001×10 ⁻⁸ mΩ/m·m
Superconducting Pt.	0.85 K

MAGNETIC PROPERTIES	
Type	Diamagnetic
Vol. Susceptibility	-0.0000158
Mass Susceptibility	-2.21×10 ⁻⁹ m ³ /Kg m ³ /kg

REACTIVITY	
Valence	2
Electronegativity	1.65 (Pauling)
Electron Affinity	0 kJ/mol kJ/mol
Ionization Energies	906.4, 1733.3 kJ/mol

ATOMIC DIMENSIONS	
Atomic Radius	142 pm pm
Covalent Radius	122 pm pm
Van der Waals Radius	139 pm pm

CRYSTAL STRUCTURE	
Structure	Simple Hexagonal
Lattice Constant	266.49, 266.49, 494.68 pm
Space Group	P63/mmc #194

ISOTOPES & NUCLEAR	
Stability	Stable
Stable Isotopes	64Zn, 66Zn, 67Zn, 68Zn, 70Zn
Isotopic Abundance	64Zn48.63%66Zn27.9%67Zn4.1%68Zn1...
Known Isotopes	54Zn ■ 83Zn (30 total)
Neutron Cross Sect.	1.1 barns

ELEMENTAL ABUNDANCES	
Universe	0.00003% %
Earth's Crust	0.0078% %
Oceans	5×10 ⁻⁷ % %
Human Body	0.0033% %

HEALTH & SAFETY	
DOT Hazard Class	4.3
RTECS Number	ZG8600000
NFPA Health/Fire/Rx	0 / 0 / 0