



Magnesium single crystal :

**Magnesium single crystal:**

Monocrystalline magnesium is widely used in matrix metals, alloy thin film materials, and biomaterials. Magnesium is a relatively soft metal with a silver white luster. It is obtained by electrolytic melting of magnesium dichloride. Magnesium can burn in air and react with hot water when ignited. It is used in bulk metals and lightweight alloys.

Magnesium is used as a sacrificial anode to protect metals exposed to seawater and groundwater.

**Product Parameter:**

Main performance parameters	
Molecular formula	Mg
Crystalline system	hexagonal crystal system
Lattice constants	a=3.20936, c=5.21112 A
Density	D=1.738 ( g/cm <sup>3</sup> )
Melting point	649 °C
Growing directions	Crucible descent method (Bridgman method)
Purity	> 4N
Thermal expansion coefficient	26.1 x 10 <sup>-6</sup> K <sup>-1</sup>
Conventional crystal orientation	<0001>;<11-20>;<10-10>;<1-102>
Crystallographic tolerance	±1°
Dimensions and tolerances	5x5,105,1010,1515,2015,2020, or customized
Thickness and tolerance	0.5mm , 1.0mm
Polishing	One side or double-sides
Surface roughness	Ra < 10 nm ( 5×5μm )
Package	100 clean bag, 1000 ultra-clean room, easy oxidation, vacuum