



Aluminum single crystal :

Single crystal aluminum is widely used in matrix metals, alloy thin film materials and biomaterials. Pure aluminum is soft and malleable, and can be strengthened by forming alloys with small amounts of other metals, such as copper or magnesium. Aluminum samples can prevent the reaction with water and air by rapidly forming an oxide film. Aluminum can be dissolved in a concentrated hydrochloric acid solution and a sodium hydroxide solution.

Aluminum metal and its alloys are widely used in vehicles, aircraft and construction industries. It is also often used in areas such as making metal cans, packaging materials and household tableware.

Product Parameter:

Main performance parameters	
Molecular formula	Al
Crystalline system	Face center cubic lattice, cubic crystal system
Lattice constants	a=4.040Å
Density	Dx=2.717 (g/cm ³) ;Dm=2.70 (g/cm ³)
Melting point	660 °C
Growing directions	Crucible descent method (Bridgman method)
Purity	> 4N
Conventional crystal orientation	<100>;<110>;<111>.
Crystallographic tolerance	±0.5°
Dimensions and tolerances	103,105,1010,1515,2015,2020, or customized
Thickness and tolerance	0.5mm , 1.0mm
Polishing	Single or double-sided
Surface roughness	Ra < 5 nm (5×5μm)
Package	100 clean bag, 1000 ultra-clean room, easy oxidation, vacuum moisture-proof preservation