

## INDO-SPHERE Ti-6Al-4V Grade-23

**Ti-6Al-4V Grade-23** is a high-performance titanium alloy recognized for its excellent balance of strength, fracture toughness, and biocompatibility. It conforms to the **UNS R56401 / ASTM F3001-14** chemical specifications. The powder is produced via Electrode Induction Melting Gas Atomization (EIGA) process at INDOMIM, which ensures exceptional purity by eliminating contact with crucibles during melting. This method yields a clean melt, uniform chemistry, highly consistent particle characteristics and excellent sphericity.

### Particle Size Distribution

Dynamic image analysis (ISO 13322-2)				
Application	Size Range	D10%	D50%	D90%
AM	20-63µm (Typical)	30.0	45.0	68.0
	45-106µm (Typical)	53.0	75.0	107.0

### Physical Properties

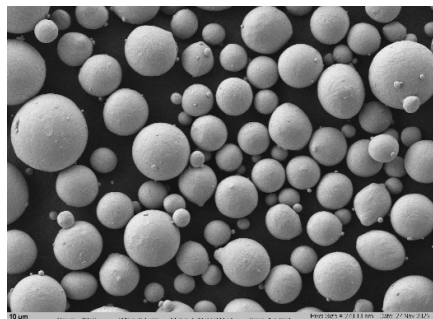
Property	Test Method
Tap Density	Measured according to ASTM B527
True Density	Measured according to ASTM B923

### Chemical Composition (weight %)

Element	Limits
Carbon	0.08 max
Vanadium	3.5 - 4.5
Aluminium	5.5 - 6.5
Yttrium	0.005 max
Iron	0.25 max
Oxygen*	0.13 max
Nitrogen*	0.03 max
Hydrogen*	0.012 max
Others each	0.1 max
Others Total	0.4 max
Titanium	Balance

\*Applicable only for LPBF

### Morphology



Magnification: 400X (Fraction: 20-63µ)



**Customization** on particle size can be made.

**Packing** with 5 kg containers & custom packing is possible.