

INLAND ATOMIZE METAL POWDER LLP

Survey No. 230/2, Por-Mangej Road, Village-Manglej, Ta. KARJAN, Vadodara - 391243

Email:Info@Inlandatomizemetalpowderllp.com

Mo: +9196623 00876

Cobalt (Co) Powder

IAMP is specialist to supply Cobalt powders, which meets specific technical requirements such as Apparent Density, Specific Surface Area and Purity. Cobalt powder is the best materials to suppress mechanical parts, structural parts and welding materials.

Physical Properties:

Molecular Formula:	Co	Color:	Silver - Grey
Shape:	Irregular / angular	Purity:	99.8%
Product method:	Hydrogen reduction	Molecular Weight:	58.93 g/mol
Freezing/Melting Point:	1495°C	Boiling Point:	2927 °C
Specific Gravity/Density:	8.9 g/cm3		

Applications:

- **Powder Metallurgy (PM)** : High-strength and wear-resistant components. Bearings, bushings, and magnetic parts. Hard alloys and tools
- **Additive Manufacturing (AM / 3D Printing)** : Aerospace and defense components requiring high strength and temperature resistance. Medical implants (biocompatible cobalt-based alloys) . Complex near-net-shape parts
- **Magnetic Applications** : Permanent magnets (SmCo-based). Magnetic recording materials and sensors
- **Superalloys** : Base material for Co-based superalloys used in gas turbines, jet engines, and high-temperature applications
- **Hard Metals & Carbides** : Binder in tungsten carbide (WC-Co) cutting tools. Wear-resistant parts and tooling
- **Chemical & Catalytic Applications** : Hydrogenation and Fischer–Tropsch catalysts. Petrochemical and chemical processing equipment

Specification:

Grade	1.5 µm	3.0 µm	3.6 µm	5.0 µm
FSS Particle Size	1.1-1.7	2.5 – 3.5	3.2 – 4.2	4.5 – 5.5
Scott Density, g/ln3	13 – 19	20 – 29	24 – 36	32 – 49
Tap Density, g/cm3	1.0 – 1.5	1.5 – 2.5	2.0 – 3.0	3.0 – 4.0
Screen Size	-150 Mesh	-150 Mesh	-150 Mesh	-150 Mesh
Oxygen Content, Wt %	0.15	0.12	0.10	0.10

Packaging:

Powder will be supplied by standard packing in Vacuum bag of 5Kg, 10Kg, and 25Kg or can be supplied as per customer special requirement.

Storage:

Keep in a cool, dry, and well-ventilated environment, away from humidity and corrosive atmospheres. Avoid direct contact with water, acids, and oxidizing agents that may cause surface oxidation. Containers must be closed immediately after use to preserve powder flowability and prevent agglomeration. Store away from heat sources, sparks, or open flames, as very fine tungsten powder can be combustible in air.

**Specification is only for Reference purposes, and it varies with application requirements*