



OMG COBALT POWDERS FOR HARDMETALS

Grade	FSSS (μm)	A.D. (g/cm^3)	T.D. (g/cm^3)	BET (m^2/g)
Ultra fine	0.3...0.5	0.4...0.6	1.4...1.6	5
Submicron	0.8...1.0	0.7...0.9	1.4...1.7	2
Extra fine HDFP	1.2...1.6	0.9...1.2	1.8...2.2	1
Extra fine standard	1.2...1.8	0.8...1.1	1.6...2.0	1
-400 mesh /fine	2.5...3.0	1.6...2.0	2.8...3.4	0.7
-400 mesh /standard	3.5...4.5	2.0...2.5	3.2...3.8	0.7

Applications:

Ultra fine

- cemented carbide tools with 0.2...0.4 μm WC

Submicron

- cemented carbide tools with 0.4...0.8 μm WC

Extra fine

- general purpose grade

-400 mesh

- cemented carbide tools with coarse ($> 5 \mu\text{m}$) WC



ULTRA FINE COBALT POWDER

Chemical composition (typical)

Ni	100 ppm
Fe	20 ppm
Mn	10 ppm
Cu	20 ppm
Zn	10 ppm
Ca	20 ppm
Mg	30 ppm
Na	20 ppm
Al	<10 ppm
Pb	< 5 ppm
Si	<50 ppm
S	80 ppm
C	600 ppm
O₂	0.8 %

Physical properties (typical)

Particle size	0.3...0.5 μm
Apparent density	0.4...0.6 g/cm^3
Tap density	1.4...1.6 g/cm^3
Specific surface area	4.0...6.0 m^2/g

Packing
- 25 kg drum



SUBMICRON COBALT POWDER

Chemical composition (typical)

Ni	50 ppm
Fe	20 ppm
Mn	15 ppm
Cu	10 ppm
Zn	<10 ppm
Ca	<10 ppm
Mg	10 ppm
Na	<10 ppm
Si	<10 ppm
S	<10 ppm
C	750 ppm
O₂	0.4 %

Physical properties (typical)

FSSS	0.8...1.0 μm
D50	5.0... 6.0 μm
AD	0.7...0.9 g/cm³
TD	1.4...1.7g/cm³

Packing

- 50 kg drum
- 25 kg drum
- 5 kg foil bag



EXTRA FINE COBALT POWDER STANDARD

Chemical composition (typical)

Ni	50 ppm
Fe	20 ppm
Mn	<15 ppm
Cu	10 ppm
Zn	<10 ppm
Ca	<10 ppm
Mg	10 ppm
Na	<10 ppm
Si	<10 ppm
S	<10 ppm
C	250 ppm
O₂	0.25 %

Physical properties (typical)

FSSS	1.2...1.6 μm
D50	8.0...9.0 μm
AD	0.8...1.1 g/cm^3
Tap density	1.6...2.0 g/cm^3

Packing

- 50 kg drum
- 25 kg drum
- 5 kg foil bag



HDFP EXTRA FINE COBALT POWDER

Chemical composition (typical)

Ni	50 ppm
Fe	20 ppm
Mn	<15 ppm
Cu	<10 ppm
Zn	<10 ppm
Ca	<10 ppm
Mg	10 ppm
Na	<10 ppm
Si	<10 ppm
S	<10 ppm
C	250 ppm
O₂	0.25 %

Physical properties (typical)

FSSS	1.2...1.6 μm
D50	6.5...7.5 μm
AD	0.9...1.2 g/cm^3
TD	1.8...2.2 g/cm^3

Packing

- 50 kg drum
- 25 kg drum
- 5 kg foil bag



-400 MESH COBALT POWDER/STANDARD

Chemical composition (typical)

Ni	30 ppm
Fe	20 ppm
Mn	15 ppm
Cu	10 ppm
Zn	<10 ppm
Ca	<10 ppm
Mg	<10 ppm
Na	<10 ppm
Si	<10 ppm
S	15 ppm
C	600 ppm
O ₂	0.45 %

Physical properties (typical)

FSSS	3.5...4.5 μm
AD	2.0...2.5 g/cm^3
TD	3.2...3.8 g/cm^3

Packing

- 50 kg drum
- 25 kg drum
- 5 kg foil bag



-400 MESH COBALT POWDER/FINE

Chemical composition (typical)

Ni	30 ppm
Fe	20 ppm
Mn	15 ppm
Cu	10 ppm
Zn	<10 ppm
Ca	<10 ppm
Mg	<10 ppm
Na	<10 ppm
Si	<10 ppm
S	15 ppm
C	600 ppm
O ₂	0.45%

Physical properties (typical)

FSSS	2.5...3.0 μm
AD	1.6...2.0 g/cm^3
TD	2.8...3.4 g/cm^3

Packing

- 50 kg drum
- 25 kg drum
- 5 kg foil bag