

TECHNICAL DATA SHEET

Co-WC

Premixed Cobalt Powder

The standard components are Cobalt powder COF C06105 and Tungsten Carbide powder 3µm CW5522.

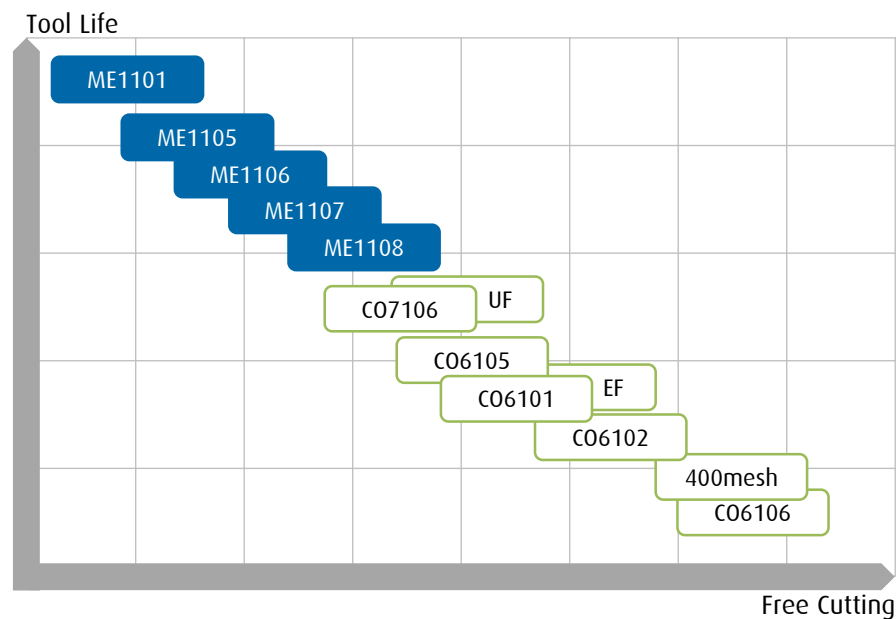
TYPICAL PHYSICAL AND CHEMICAL DATA

Co-WC powder	ME1108	ME1107	ME1106	ME1105	ME1101
Co (wt %)	90	80	70	60	25
WC (wt %)	10	20	30	40	75
Theoretical density (g/cm ³)	9.3	9.7	10.2	10.8	13.2
Scott density (g/cm ³)	0.9	1.0	1.1	1.2	2.2
Recommended sintering temperature* (°C)	850	950	1030	1060	1190
Hardness HV10	350	400	440	470	-
Equivalent HB hardness	340	390	420	450	-

* By hot pressing under 375kg/cm²

Co-WC granulated	ME5107	ME5117
Co (wt %)	80	80
WC (wt %)	20	20
Granule size (µm)	63 - 450	250 - 630
Scott density (g/cm ³)	2.6	2.7
Tap density (g/cm ³)	2.9	3.0
Hall flow (s/50g)	7.0	7.0
Binder (wt %)	2.75	2.75

PERFORMANCES - RELATIVE POSITIONING



SAFETY & MSDS

Material is packed in aluminized plastic bags under inert atmosphere
Keep bags tightly closed and in a dry area
After opening and to avoid any oxydation, use the desiccant bags placed in the drums for further usage

Review and follow carefully the handling and exposure precautions detailed in the Material Safety Data Sheet (MSDS) or Information Product Sheet (IPS)
For more information, contact toolmaterials@eu.umicore.com

GENERAL INFORMATION

Umicore Cobalt and Specialty Materials produces and markets a variety of Cobalt-, Nickel-, or Tungsten-based chemicals and powders for a broad range of industrial applications including hard metals, diamond tools, pigments, catalysis, plating, paint, tires and animal feed.

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