

TECHNICAL DATA SHEET

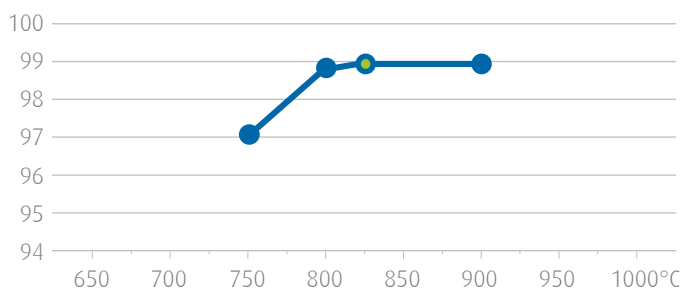
STEP®10

Base Pre-Alloyed Powder

TYPICAL PHYSICAL AND CHEMICAL DATA

STEP®10 powder	
Theoretical density (g/cm^3)	7.80
Scott density (g/cm^3)	1.5
Tap density (g/cm^3)	2.5
Oxygen content (wt %)	1.0
Fisher grain size (μm)	2.5

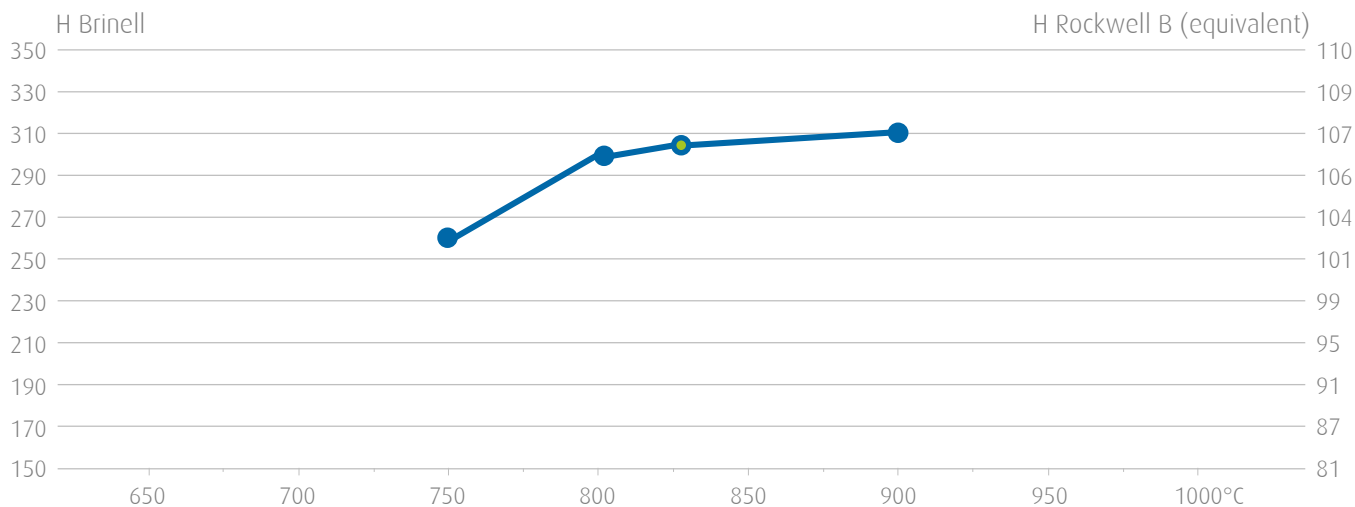
% RELATIVE DENSITY



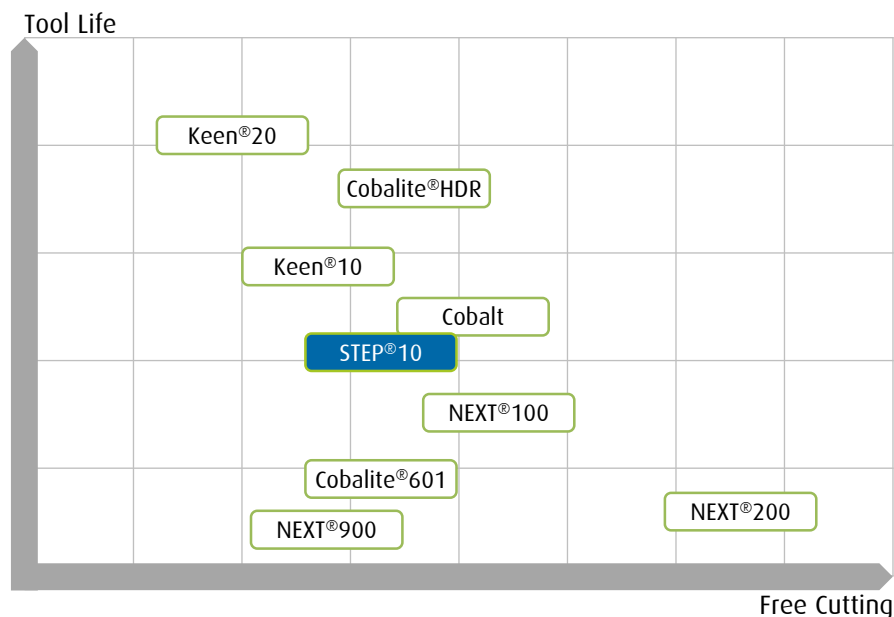
SINTERING CONDITIONS

Minimum sintering temperature	800°C
Recommended sintering temperature	825°C
Pressure	350kg/cm ²
Holding time	3 min

HARDNESS



PERFORMANCES - RELATIVE POSITIONING



STEP®10 : base powder to be mixed with additives to optimize tool performances

APPLICATIONS

TOOLS	☒ Saw blade	☐ Quarry wire	☐ Grinding tool
	☒ Core drill	☐ Single wire	☐ Polishing tool
	☐ Gang saw	☐ Multi-wires	☐ Profiling tool
MATERIALS	☐ Limestone	☐ Sandstone	☐ Synthetic stone
	☒ Marble	☒ Concrete	☐ Ceramic
	☒ Granite	☐ Asphalt	☐ Glass

Above information is indicative. For detailed recommendation, please contact us.

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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