

TECHNICAL DATA SHEET

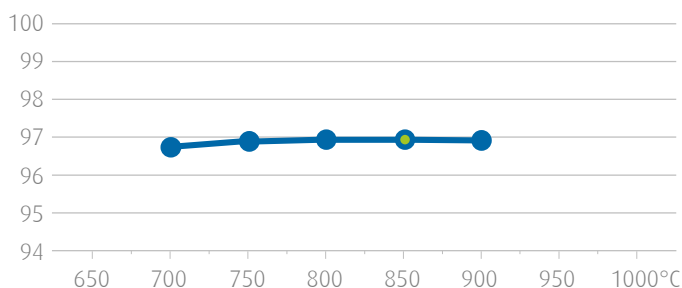
NEXT[®]100

Base Pre-Alloyed Powder

TYPICAL PHYSICAL AND CHEMICAL DATA

NEXT [®] 100 powder		NEXT [®] 101 granulated	
Theoretical density (g/cm^3)	8.62	Scott density (g/cm^3)	2.3
Scott density (g/cm^3)	0.8	Tap density (g/cm^3)	2.6
Tap density (g/cm^3)	1.95	Hall flow ($s/50g$)	8.0
Oxygen content (wt %)	0.5	Binder (wt %)	2.75
Fisher grain size (μm)	1.15	Granule size (μm)	63 - 450

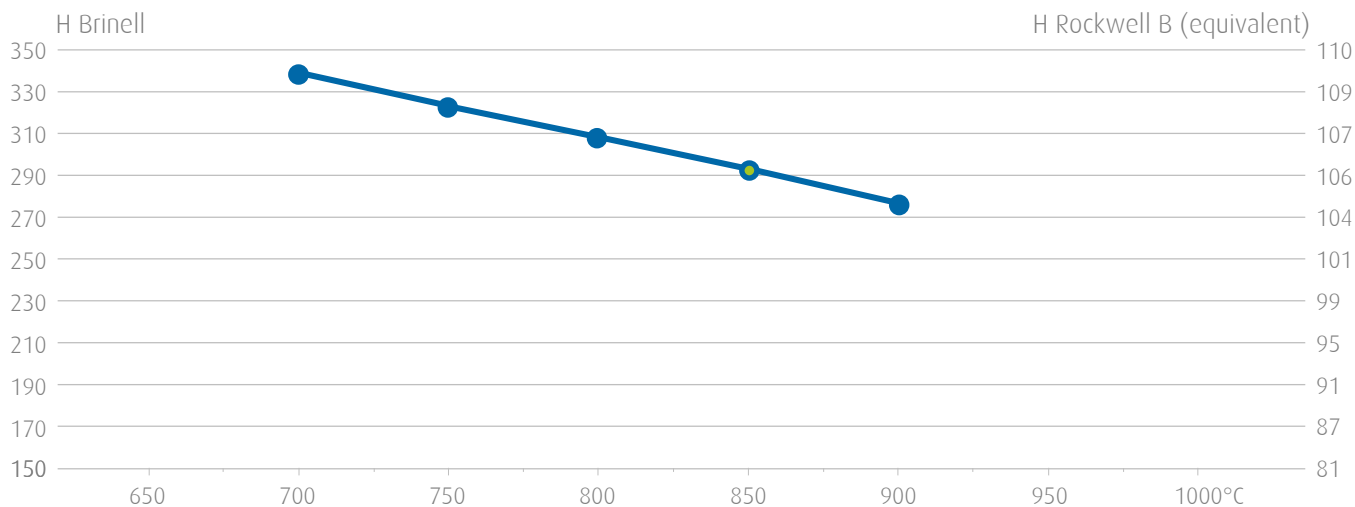
% RELATIVE DENSITY



SINTERING CONDITIONS

Minimum sintering temperature	825°C
Recommended sintering temperature	850°C
Pressure	350kg/cm ²
Holding time	3 min

HARDNESS

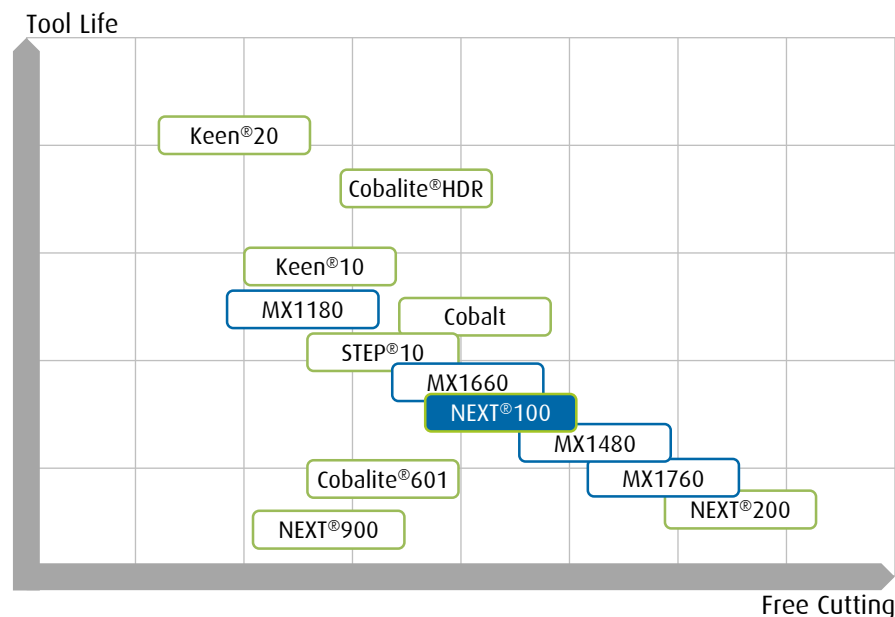


NEXT®100

Base Pre-Alloyed Powder



PERFORMANCES - RELATIVE POSITIONING



NEXT®100 : 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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