

Cemented carbide grade: N09

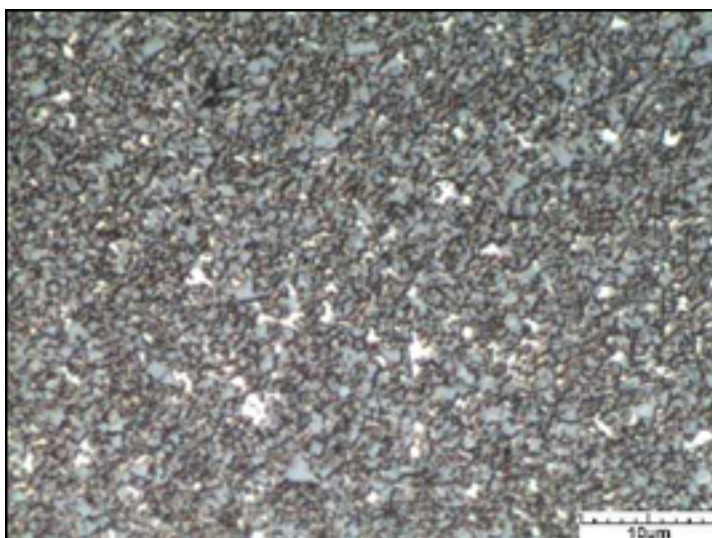
Physical properties:

Density:	14,60 ± 0,1	g/cm ³
Hardness:	1540 ± 30	HV30
Transverse rupture strength:	522,14	10 ³ psi
Compression strength:	6000	MPa
Modulus of elasticity:	585	GPa
Modulus of rigidity:	239	GPa
Poisson's ratio:	0,22	
Thermal conductivity:	114,3	W/(m*K)
Thermal expansion coefficient:	5,7	10 ⁻⁶ /K
Fracture toughness:	9,9	MPa*m ^{1/2}

Yield strength = tensile strength

For WC-Co cemented carbide grades applies: The tensile strength is one third of the compression strength.

Microstructure:



WC grain size:	1,0 μm
Tungsten carbide:	92,00 wt%
Other carbides:	
Binder:	8,00 wt%