

## Material data sheet

**Grade:** : **KFM 47**

### Chemical Data

Co	[Weight- %]	:	7,0
WC (Incl. Doping)	[Weight- %]	:	93,0

### Physical Data

Density		[g/cm <sup>3</sup> ]	:	14,75	±0,15
Hardness	HV 30		:	1980	±50
Transverse Rupture Strength		[N/mm <sup>2</sup> ]	:	> 4500	
Magnetic Saturation	4πσ	[μTm <sup>3</sup> /kg]	:	11,0	±1,5
Coercive Force	HC	[kA/m]	:	36,0	±2,5
K <sub>IC</sub> (Palmqvist)		[MNm <sup>-3/2</sup> ]	:	9,0	

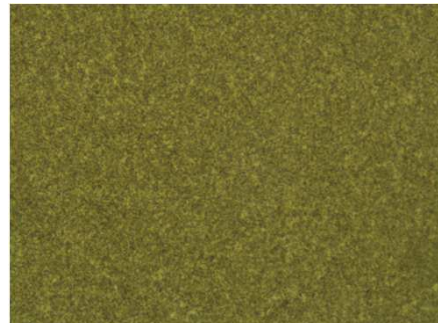
### Metallographic Data

Porosity	A (<10μm)	:	≤02
	B (>10μm)	:	-
	C	:	-

### Microstructure

Tungsten Carbide α	:	Ø < 0,5μm
Binding Phase β	:	uniform distributed

etched 1000x



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