



Material data sheet

Grade : **KFM 47**

Chemical Data

Co	[Weight- %]	:	7,0
WC	[Weight- %]	:	92,2
Doping [VC+Cr3C2]	[Weight- %]	:	0,8

Physical Data

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

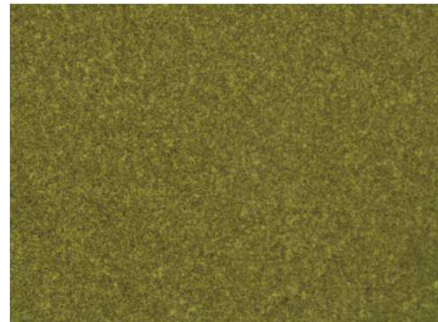
Metallographic Data

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

Microstructure

Tungsten Carbide α	:	average grain size 0,4μm
Binding Phase β	:	uniform distributed

etched 1000x



Version: 15.03.2017