



Ultra Carbide, LLC

29550 WM. K. Smith Drive Suite C
New Hudson, MI 48165

Phone: 248-446-1744

Fax: 248-692-0494

email: sales@ultracarbide.com

website: www.ultracarbide.com



BERLIN CARBIDE

Carbide grade: DK 120UF

Chemical Composition:

WC 93,00 %

Co 7,00 %



Physical Properties:

Density [g/cm³]: 14,70 ± 0,20
(ISO 3369)

Coercive Force [kA/m]: 27,85 ± 2,79
(ISO 3326) [Oe]: 370 35

Magnetic Saturation [0.1µT·m³/kg]: 115 ± 10

Hardness (ISO 3878) HV30 [kg/mm²]: 1850 ± 50

Hardness (ISO 3778) HRA 93.4 0,2

TRS [N/mm²]: 3000 Minimum

(ISO 3327/Type B)
K1C [MPa](m)^{1/2}] 9,4 Minimum

Porosity [ISO 4505] A<02 B<02

Microstructure Homogenous, no eta-Phase, no free carbon

WC- Grain Size (FSSS) 0,5 µm

Classification [ISO 513] K05 US/Buick C3, C4

Ultra fine grade with high hardness for reamer applications.