



## Ultra Carbide, LLC

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# G-ELIT

Ultra Carbide Inc. /Plant

G-Elit Hartstoffe GmbH

Lübarser Straße 10 -38

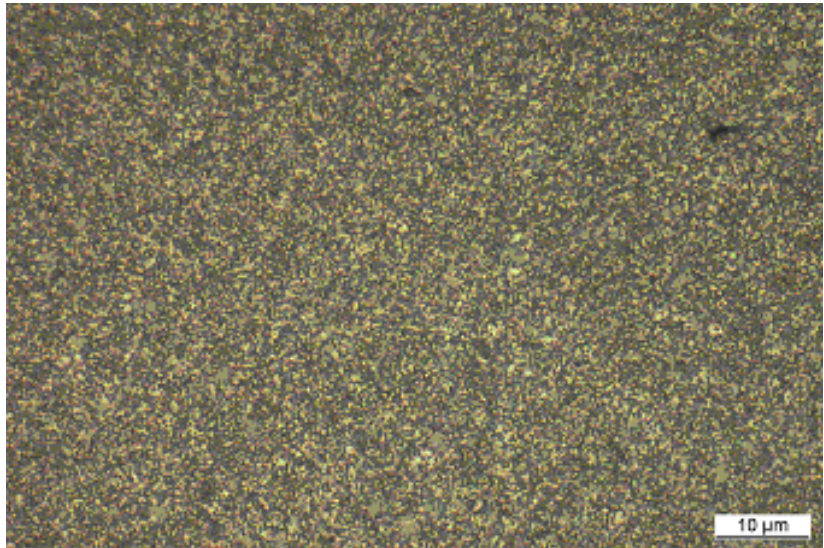
13435 Berlin

### Carbide grade: DK 460UF

#### Chemical Composition:

WC 90,00 %

Co 10,00 %



#### Physical Properties:

Density [g/cm<sup>3</sup>]: 14,45 ± 0,20  
(ISO 3369)

Coercive Force [kA/m]: 21,49 ± 2,79  
(ISO 3326) [Oe]: 270 35

Magnetic Saturation [0.1µT·m<sup>3</sup>/kg]: 165 ± 10

Hardness (ISO 3878) HV30 [kg/mm<sup>2</sup>]: 1620 ± 50

Hardness (ISO 3778) HRA 92 0,2

TRS [N/mm<sup>2</sup>]: 3700 Minimum

(ISO 3327/Type B)  
K1C [MPa ](m)<sup>1/2</sup>] 9,6 Minimum

Porosity A<02 B<02  
[ISO 4505]

Microstructure Homogenous, no eta-Phase, no free carbon

WC- Grain Size (FSSS) 0,55 µm

Classification K30/K40 US/Buick C2, (C10 + C5 Coated)  
[ISO 513]

Ultra fine grade with maximum toughness and high hardness for rotating tools.