



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 400N

Chemical Composition:

WC 90,00 %

Co 10,00 %



Physical Properties:

Density [g/cm³]: 14,50 ± 0,20
(ISO 3369)

Coercive Force [kA/m]: 19,89 ± 2,79
(ISO 3326) [Oe]: 250 35

Magnetic Saturation [0.1µT·m³/kg]: 160 ± 10

Hardness (ISO 3878) HV30 [kg/mm²]: 1580 ± 50

Hardness (ISO 3778) HRA 91,7 0,2

TRS [N/mm²]: 3200 Minimum

(ISO 3327/Type B) K1C [MPa](m)^{1/2}] 11,0 Minimum

Porosity A<02 B<02
[ISO 4505]

Microstructure Homogenous, no eta-Phase, no free carbon

WC- Grain Size (FSSS) 0.7 µm

Grain Growth Inhibitors VC 0,20%, Cr3C2: 0,5%

Classification K20/K40, US/Buick C1 C10, C5 coated
[ISO 513]

Ultra fine grade with maximum toughness for rotating tools, especially roughing endmills.