IKH 658
HDSiC 13

Grain Size Distribution

d_{10}	> 0.1 µm
d_{50}	0.3 – 0.7 µm
d_{90}	< 1.9 µm
Specific Surface Area	12 – 14 m^2/g

Chemical Composition

SiC	> 98.5 %
B_4C	0.5 – 1.5 %
Al_2O_3	< 0.1 %
Fe_2O_3	< 0.1 %
MgO	< 0.05 %
CaO	< 0.05 %
TiO_2	< 0.1 %
Na_2O	< 0.05 %
K_2O	< 0.05 %

These properties are typical but do not constitute specifications

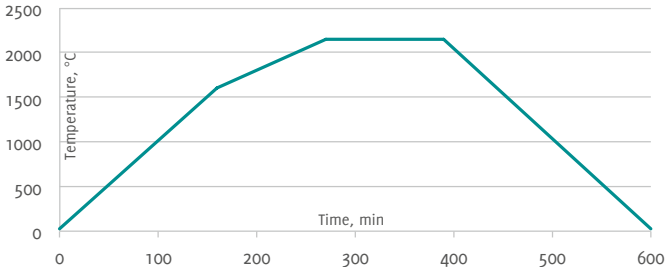
Physical Properties

Sintered Density [1)]	3.19 – 3.21 g/cm^3
Apparent Density	0.65 g/cm^3
Flexural Strength	560 MPa
Young's Modulus	410 GPa
Shrinkage	17.5 – 18.5 %
Color	dark grey

1) at 200 MPa

Recommended Sintering Conditions

Pressure	30 MPa
Max. Sinter Temperature	2150 °C



The shown debinding and sintering cycles are exemplary. More information on request.

Applications

For Hot Pressing

Advantages

- High density and high strength material that reaches the theoretical density of SiC
- Good flow and mold filling behavior
- Does not contain organics
- Easy to press

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