

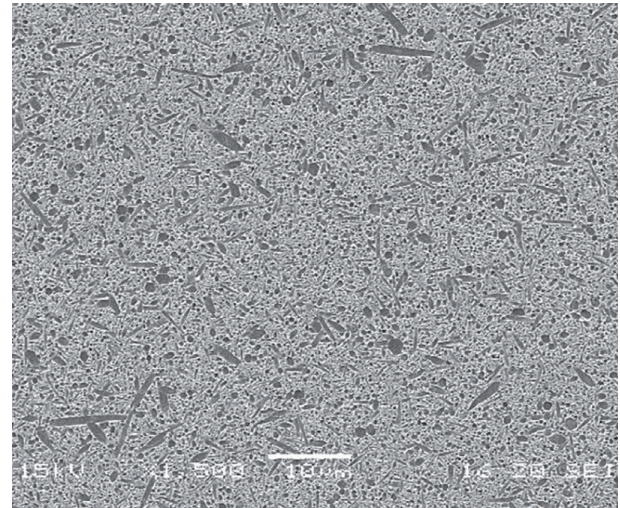
# Standard grade data sheet

## Grade SNC1

ISO Code CN-K20  
 US Industry Code  
 Version 07.1

### Chemical composition

Element	Weight %
$Al_2O_3Y_2O_3$	9.0
$Si_3N_4$	balance



Typical microstructure (x1500)

### Physical and mechanical properties

Average grain		ultrafine
Density (ISO 3369)	g/cm <sup>3</sup>	3.25
Hardness (ISO 3878)	HV <sub>10</sub>	1550
Hardness (ISO 3878)	HV <sub>30</sub>	1530
Hardness (ISO 3738)	HRA	91.5
Transverse rupture strength (ISO 3327)	MPa	1100
Compressive strength	MPa	3000
Young's modulus	GPa	300
Fracture toughness (SEVNB)	MPa.m <sup>1/2</sup>	6.5
Thermal conductivity	Wm <sup>-1</sup> K <sup>-1</sup>	30
Thermal expansion coefficient (20-400°C)	10 <sup>-6</sup> K <sup>-1</sup>	3.3

The information is conveyed as an example only and does not constitute neither a specification nor a representation.