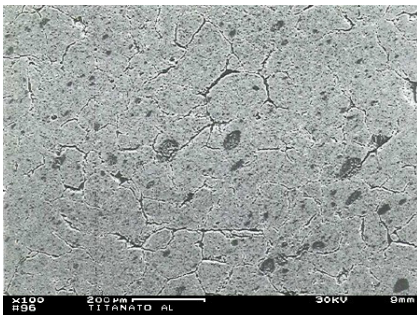




KTiAl

Aluminium Titanate



Typical microstructure

Main properties

- High thermal shock resistance
- Very low thermal conductivity
- Corrosion and wear resistance
- Low coefficient of thermal expansion
- Non-wetted by non-ferrous molten metals

Applications

- Foundry technology
- Riser tubes
- Sprue nozzles

Physical properties

Parameters	Units	Value
Density	g/cm ³	3.1
Flexural Strength	MPa	30
Hardness	GPa	14
Young Modulus	GPa	20
Thermal conductivity	W/m·k	2
Thermal Expansion Coefficient (20-1000°C)	10 ⁻⁶ K ⁻¹	1.5
Maximum continuous working temperature	°C	1100
Maximum non-continuous working temperature	°C	1400
Dielectric strength	KV/mm	>10 ¹³

*All properties measured at 20°C unless otherwise stated