



Characteristics and scope of application

- Material may be offered solution annealed or precipitation hardened.
- It offers reasonable strength, good corrosion and creep resistance in air at elevated temperatures up to 800°C.

Standard designations

- DN designation NiCr20TiAl
- Alloy number / UNS 2.4952 / 2.4631 / N07080
- Norms DIN 17742 / DIN EN 10090 / DIN EN 10269 / DIN EN 10302 / ASTM B 637
- Typical chemical composition Ni 75%, Cr 20%, Ti 2.2%, Al 1.4%

Physical properties

| Density | Temperature liquidus line | Electrical resistivity | Mean coefficient of thermal expansion |
|--------------------|---------------------------|------------------------|---------------------------------------|
| kg/dm ³ | °C | Ohm mm ² /m | 10 ⁻⁶ /K RT to 400°C |
| 8.2 | 1360 | 1.24 | 14 |

Mechanical properties

| Ultimate tensile strength | Yield strength | Elongation |
|---------------------------|----------------|-------------|
| MPa | MPa | % |
| 900* 1200** | 600* 800** | 30* 20** |

* solution annealed

** solution annealed and precipitation hardened