

General

Property	Standard	Unit	Value
Specific mass	-	g/cm ³	7.9
Carbon content (C)	EN 10088-2	%	≤ 0.08
Manganese (Mn)	EN 10088-2	%	≤ 2.00
Phosphorus (P)	EN 10088-2	%	≤ 0.045
Sulfur (S)	EN 10088-2	%	≤ 0.015
Chromium (Cr)	EN 10088-2	%	17.5 - 19.5
Nickel (Ni)	EN 10088-2	%	8.0 - 10.5

Mechanical

Property	Standard	Unit	Value
Tensile strength	EN 10088-2	MPa	500 - 700
Elongation at break	EN 10088-2	%	≥ 45
Yield strength (0.2% offset)	EN 10088-2	MPa	≥ 190
Hardness (Brinell)	-	HB	≤ 215

Thermal

Property	Standard	Unit	Value
Thermal conductivity	-	W/m·°C	~ 15
Specific heat capacity	-	J/kg·°C	~ 500
Linear expansion coefficient	-	10 ⁻⁶ /°C	~ 16.5
Long-term operating temperature (unloaded)	-	°C	-200 / 870
Maximum short-term operating temperature	-	°C	925

Electrical

Property	Standard	Unit	Value
Electrical resistivity	-	Ω·m	~ 7.2 × 10 ⁻⁷

Temperature Range

Temperature	Unit	Value
Minimum operating temperature	°C	-200
Maximum operating temperature	°C	+925

Additional Properties

Property	Behavior
Weldability	Excellent
Forgeability	Good
Corrosion resistance	Very good