

General

Property	Standard	Unit	Value
Density	-	g/cm ³	7.85
Carbon content (C)	EN 10130	%	≤ 0.12
Manganese (Mn)	EN 10130	%	≤ 0.60
Phosphorus (P)	EN 10130	%	≤ 0.045
Sulfur (S)	EN 10130	%	≤ 0.045

Mechanical

Property	Standard	Unit	Value
Tensile strength	EN 10130	MPa	270 - 410
Elongation at break	EN 10130	%	≥ 28
Yield strength (0.2% offset)	EN 10130	MPa	140 - 280
Hardness (Brinell)	-	HB	85 - 120

Thermal

Property	Standard	Unit	Value
Thermal conductivity	-	W/m·°C	~ 50
Specific heat capacity	-	J/kg·°C	~ 460
Linear thermal expansion coefficient	-	10 ⁻⁶ /°C	~ 11
Long-term operating temperature (unloaded)	-	°C	-40 / 150
Maximum short-term operating temperature	-	°C	200

Electrical

Property	Standard	Unit	Value
Electrical resistivity	-	Ω·m	~ 1.6 × 10 ⁻⁷

Temperature Range

Temperature	Unit	Value
Minimum Operating Temperature	°C	-40
Maximum Operating Temperature	°C	+200

Additional Properties

Property	Behavior
Weldability	Good
Forgeability	Good
Corrosion resistance	Low