

MATERIAL NUMBER 1.4509 · CLASS 1.4

1.4509

Chemical composition, mechanical and physical property values, and 9 standard designations from 4 regions.

DENSITY 7.7 g/cm ³	OTHER DESIGNATIONS 9 in 4 regions	PROPERTY VALUES 8 on file
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Chemical composition

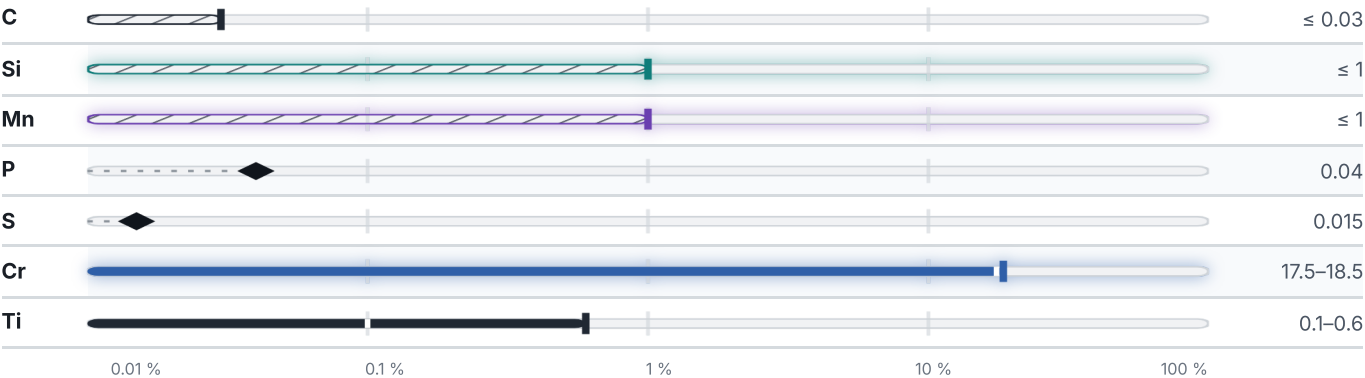
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 79.6 % ● Cr — 18 % ● Si — 1 % ● Mn — 1 % ● Traces & impurities · 0.4 %

Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.



The scale is logarithmic, not the element's raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

Predicted transformation temperatures

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Mo.

Mechanical properties

1 values across 1 conditions

SOFT ANNEALED	HB
Soft annealed	200

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.7	g/cm³

Designations across standards

9 designations · 3 documented as identical

United States		4	International		2
S43940	This grade's own name	uns	4509-439-40-x		iso
441		aisi-sae	X2CrCuTiNb18		iso
S43932		aisi-sae			
S43940		aisi-sae	France		1
Europe		2	Z3CTNb18		afnor
X2CrTiNb18	This grade's own name	din-en			
X6CrTiNb18	This grade's own name	din-en			

Note on use. The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

Enquiry about 1.4509

Quotation, availability, mill certificate or a technical question — directly on the material page.

[Start an enquiry](#)

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.4509	Aug 20, 2026