

MATERIAL NUMBER 1.4951 · CLASS 1.4

S31009

Material no. 1.4951

also listed as X6CrNi25-20

Chemical composition, mechanical and physical property values, and 34 standard designations from 7 regions.

DENSITY

7.85 g/cm³

OTHER DESIGNATIONS

34 in 7 regions

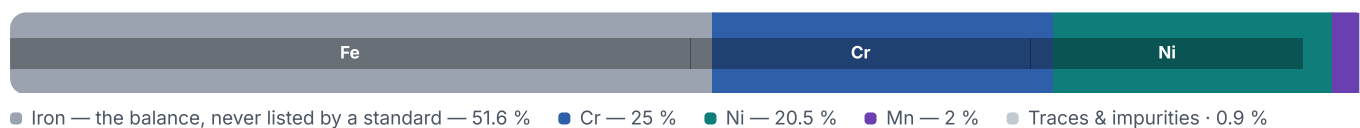
PROPERTY VALUES

9 on file

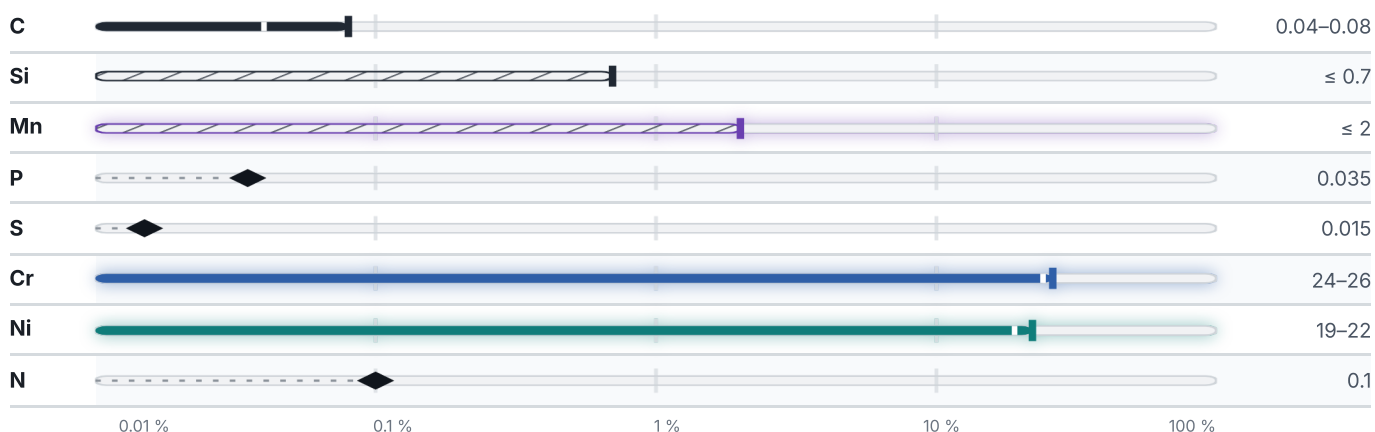
Chemical composition

Mass fraction in %

What this alloy is



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: Mo.

Mechanical properties

7 values across 2 conditions

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	520	205	40	–	–	–
Hot-rolled	–	–	–	187	90	200
SOFT ANNEALED						HB
Soft annealed						192

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

34 designations · 3 documented as identical

United States		24	United States / Aerospace		5
S31008		uns	5521		ams
S31009	This grade's own name	uns	5572		ams
30310S		aisi-sae	5577		ams
310H	This grade's own name	aisi-sae	5651		ams
310S		aisi-sae	7490		ams
A1012		astm	Europe		1
A213		astm			
A240		astm	X6CrNi25-20	This grade's own name	din-en
A249		astm			
A264		astm	United Kingdom		1
A276		astm	310S31		bs
A312		astm			
A314		astm	International		1
A358		astm	X6CrNi25-21		iso
A409		astm			
A473		astm	Japan		1
A479		astm	SUS310S		jis
A511		astm			
A554		astm	China		1
A580		astm	0Cr25Ni20		gb
A813		astm			
A814		astm			
A924		astm			
A943		astm			

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 S31009

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

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DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Aug 20, 2026