

MATERIAL NUMBER 1.6546 · CLASS 1.6

1.6546

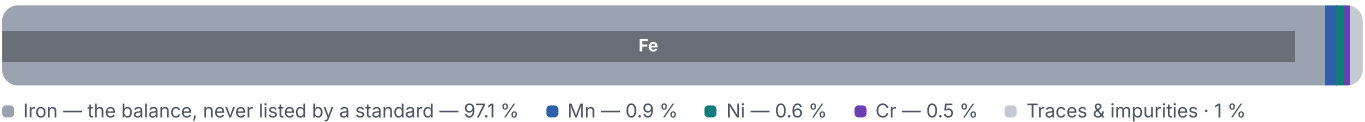
Chemical composition, mechanical and physical property values, and 43 standard designations from 13 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 43 in 13 regions	PROPERTY VALUES 9 on file
--	---	-------------------------------------

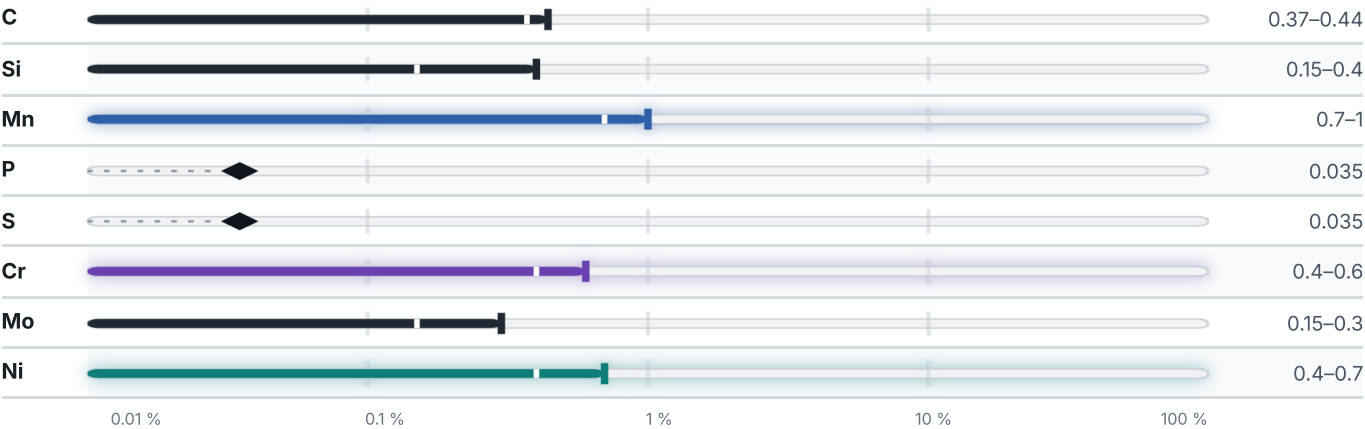
Chemical composition

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

computed from composition · °C

PREDICTED AE3 766 °C	PREDICTED AE1 722 °C	PREDICTED ACM 613 °C	PREDICTED BS 533 °C
--------------------------------	--------------------------------	--------------------------------	-------------------------------

Mechanical properties

4 values across 1 conditions

QUENCHING 840°C, OIL, DRAWING 560 - 620°C, AIR	RM N/mm ²	RE N/mm ²	A5 %	KCU kJ/m ²
Ø 25	980	835	12	880

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

43 designations · 12 documented as identical

United States	17	United Kingdom	3
G86400 This grade's own name	uns	311-Type 7	bs
G87400 This grade's own name	uns	3111-Type7	bs
G87420 This grade's own name	uns	871M40	bs
H86400 This grade's own name	uns	Italy	3
H87400 This grade's own name	uns	40NiCrMo2	uni
K11640	uns	40NiCrMo2(KB)	uni
K13049 This grade's own name	uns	KB	uni
8640 This grade's own name	aisi-sae	Europe	2
8640H This grade's own name	aisi-sae	1.6546	din-en
8740 This grade's own name	aisi-sae	40NiCrMo2-2 This grade's own name	din-en
8740H This grade's own name	aisi-sae		
8742 This grade's own name	aisi-sae	Japan	2
9840	aisi-sae	SNCM240	jis
G86400	aisi-sae	SNCM439	jis
G98400	aisi-sae	France	1
4340	astm	40NCD2	afnor
A331	astm	United States / Aerospace	1
Spain	5	6322	ams
40NiCrMo2	une	China	1
40NiCrMo2DF	une	40CrNiMoA	gb
F.1204	une	Poland	1
F.1204-40NiCrMo2	une	37HGNM	pn
F.1205	une	Latin America	1
Russia / CIS	5	8640	copant
38KHGNM	gost	Belgium	1
38XГHM	gost	40NiCrMo2	nbn
40KHGNM	gost		
40XHMA	gost		
40XГHM	gost		

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 1.6546
Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

DATASHEET ONLINE
View the material page

GRADE SEARCH
Search all grades

MATERIAL NO.
1.6546

ISSUED
Aug 20, 2026