

MATERIAL NUMBER 1.0491 · CLASS 1.0

1.0491

Chemical composition, mechanical and physical property values, and 10 standard designations from 5 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 10 in 5 regions	PROPERTY VALUES 15 on file
--	--	--------------------------------------

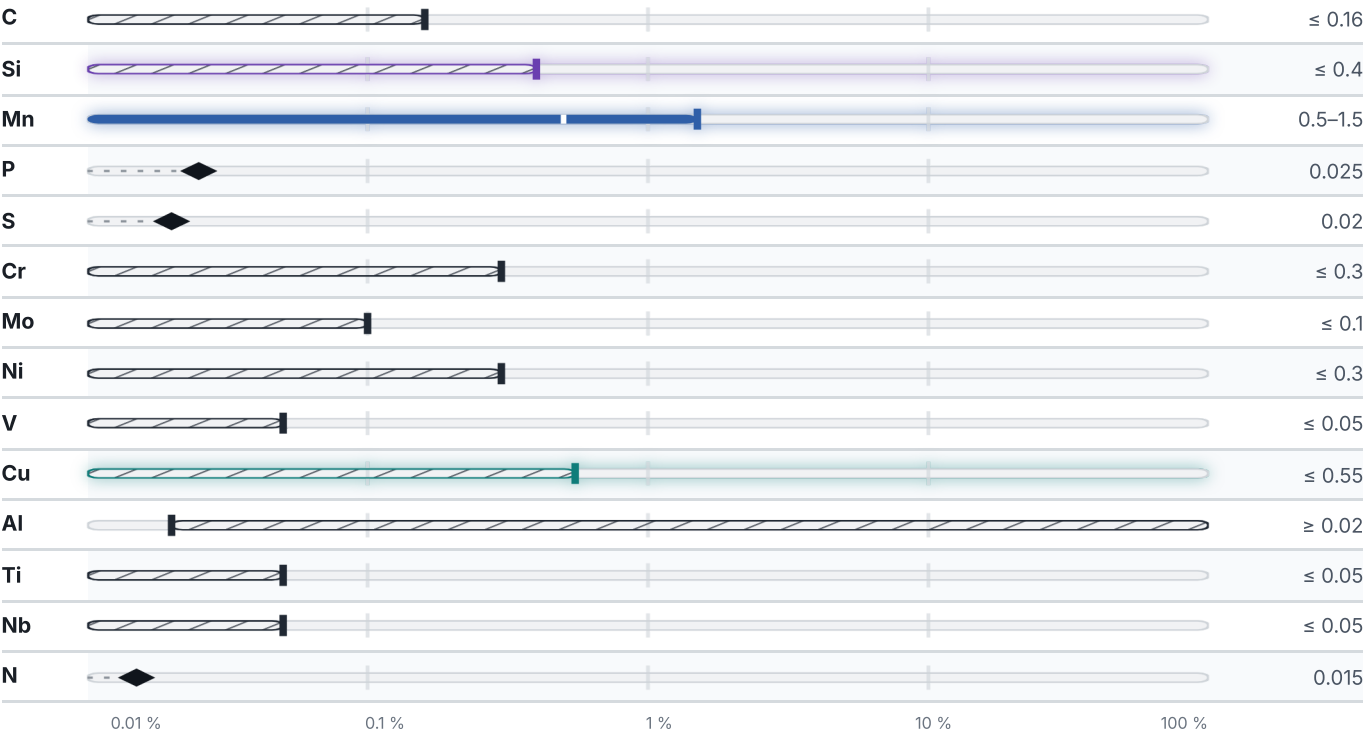
Chemical composition

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 817 °C	PREDICTED AE1 714 °C	PREDICTED ACM 402 °C	PREDICTED BS 556 °C
-------------------------	-------------------------	-------------------------	------------------------

Mechanical properties

17 values across 2 conditions

CONDITION · DIMENSION	REH N/mm²	A %
≤ 16	275	24
16 – 40	265	24
40 – 63	255	24
63 – 80	245	23
80 – 100	235	–
80 – 200	–	23
100 – 150	225	–
150 – 200	215	–
200 – 250	205	23

FLAT AND LONG PRODUCTS	RM N/mm²
≤ 100	370–510
100 – 200	350–480
200 – 250	350–480

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

10 designations · 3 documented as identical

Europe	3	United States	3
FeE275KTN	din-en	K01802 This grade's own name	uns
S275NL This grade's own name	din-en	1518	aisi-sae
TStE 285 This grade's own name	din-en	A633Gr.A	aisi-sae
		Czechia	2
		11478	csn
		13030	csn

United Kingdom	1	Italy	1
43EE	bs	FeE275KTN	uni

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 1.0491

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	1.0491	Aug 20, 2026