SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.0546 · CLASS 1.0

FeE355KTN

Material no. 1.0546

also listed as S355NL

Chemical composition, mechanical and physical property values, and 15 standard designations from 8 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	15 in 8 regions	15 on file

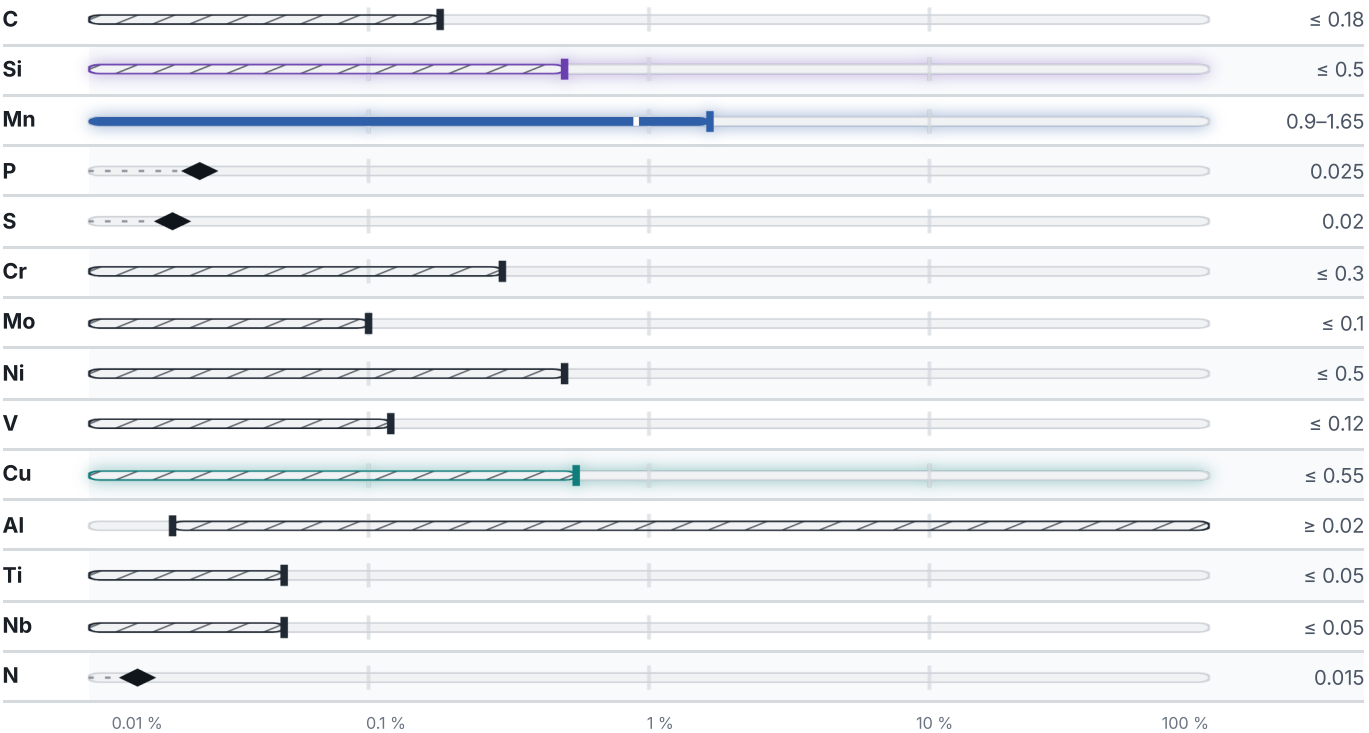
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 96.3 % · Mn — 1.3 % · Cu — 0.6 % · Si — 0.5 % · Traces & impurities · 1.4 %

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

computed from composition · °C

PREDICTED AE3	PREDICTED AE1	PREDICTED ACM	PREDICTED BS
812 °C	711 °C	421 °C	547 °C

Mechanical properties

17 values across 1 conditions

CONDITION · DIMENSION	REH N/mm²	RM N/mm²	A %
≤ 16	355	–	22
16 – 40	345	–	22
40 – 63	335	–	22
63 – 80	325	–	21
80 – 100	315	–	–
80 – 200	–	–	21
≤ 100	–	470–630	–
100 – 200	–	450–600	–
100 – 150	295	–	–
150 – 200	285	–	–
200 – 250	275	450–600	21

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

15 designations · 4 documented as identical

Europe 4

A633Gr.D	din-en
FeE355KTN	din-en
S355NL This grade's own name	din-en
TStE 355 This grade's own name	din-en

United States 4

K12000 This grade's own name	uns
K12037 This grade's own name	uns
A633Gr.C	aisi-sae
A633Gr.D	aisi-sae

France 2

E355FP	afnor
E355FR	afnor

United Kingdom 1

50EE	bs

Spain 1

AE355KT	une

China 1

Q345E	gb

Italy	1
FeE355KTN	uni

Sweden	1
2135-01	ss

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.

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.0546	Aug 20, 2026