

10Cr15

Chemical composition, mechanical and physical property values, and 1 standard designations from 1 regions.

ELASTIC MODULUS 200 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 12 on file
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Chemical composition

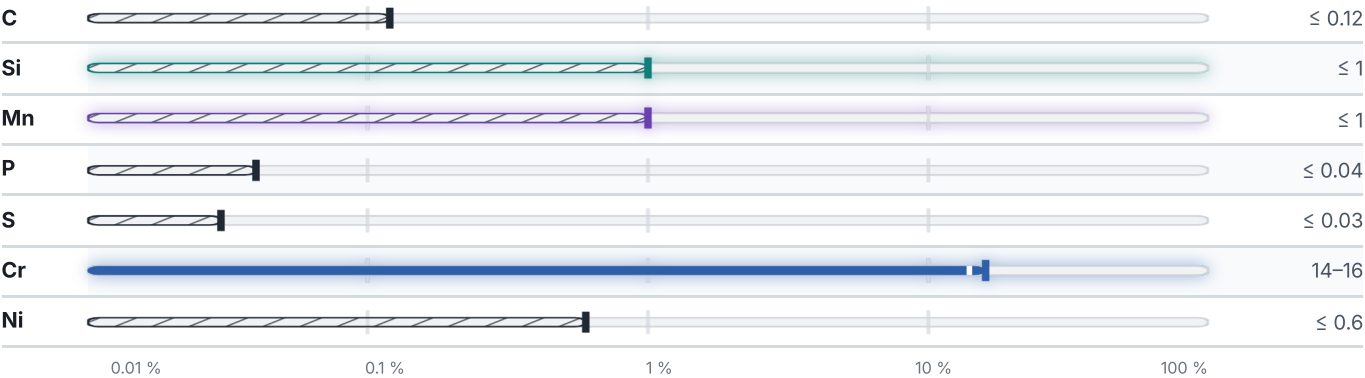
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 82.2 % ● Cr — 15 % ● Si — 1 % ● Mn — 1 % ● Traces & impurities · 0.8 %

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.

Physical properties

5 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)
20	220	—	—	—

CONDITION · DIMENSION	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)
100	215	10.3	26	—
200	210	—	—	—
300	205	—	—	—
400	195	—	—	—
500	—	11.9	—	460
PROPERTY			VALUE	UNIT
Elastic modulus			200	GPa
Thermal expansion coefficient			10.3	10 ⁻⁶ /K
Thermal conductivity			26–100	W/(m·K)
Specific heat capacity			460	J/(kg·K)
Electrical resistivity			590	nΩ·m

Designations across standards

1 designations · 1 documented as identical

China	1
10Cr15 This grade's own name	gb

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 10Cr15

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	—	Aug 15, 2026