

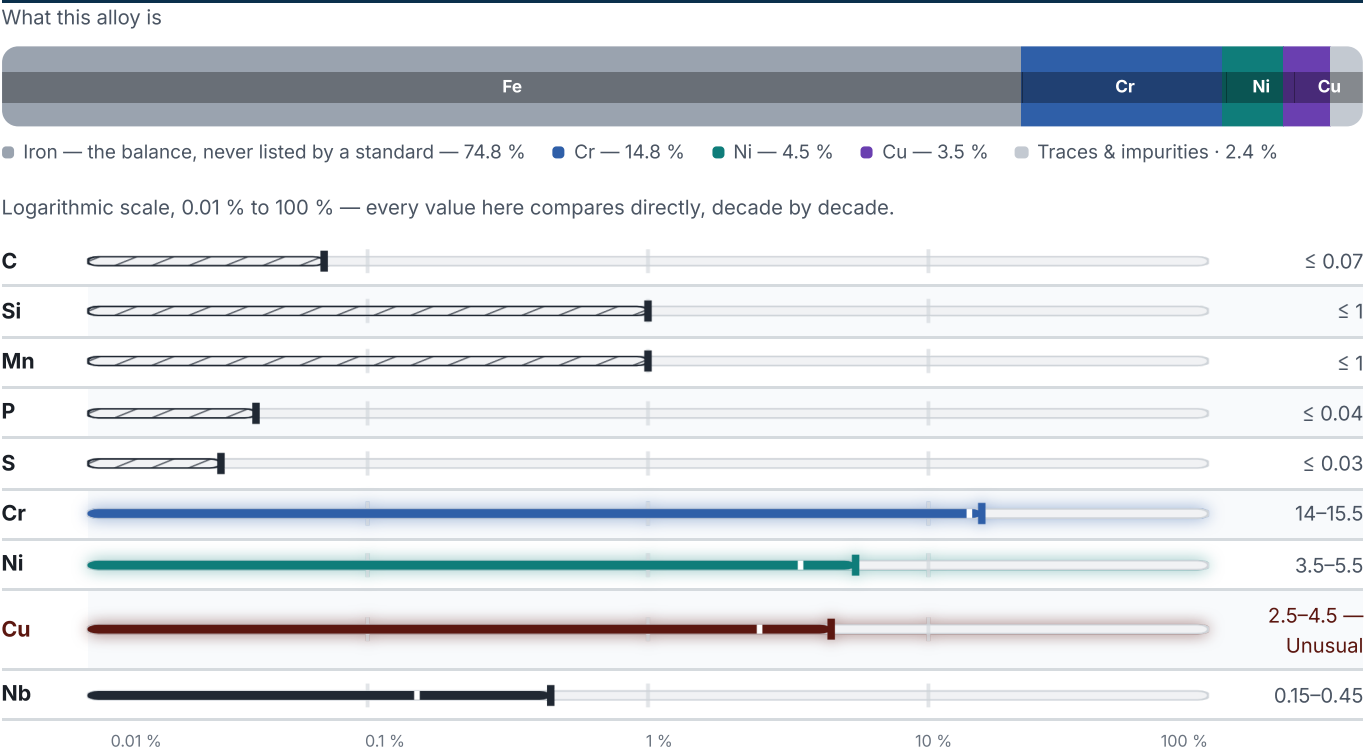
05Cr15Ni5Cu4Nb

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

ELASTIC MODULUS 195 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 13 on file
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Chemical composition

Mass fraction in %



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

4 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ^{^-6} /K	LAMBDA W/(m·K)	CP J/(kg·K)
20	195	—	—	—
100	192	10.8	17.9	—
200	186	10.8	—	—
300	180	11.2	—	—
400	172	11.3	—	—
500	167	12	23	460

PROPERTY	VALUE	UNIT
Elastic modulus	195	GPa
Thermal expansion coefficient	10.8	10 ^{^-6} /K
Specific heat capacity	460	J/(kg·K)
Electrical resistivity	980	nΩ·m

Heat treatment

9 regimes

STEP	TEMPERATURE	MEDIUM
multiple operations, source states neither order nor alternation		
Precipitation hardening	480 °C	—
Ageing	Temperature not stated	—
Ageing	550 °C	—
multiple operations, source states neither order nor alternation		
Precipitation hardening	550 °C	—
Ageing	Temperature not stated	—
multiple operations, source states neither order nor alternation		
Precipitation hardening	580 °C	—
Ageing	Temperature not stated	—
Ageing	580 °C	—
multiple operations, source states neither order nor alternation		
Precipitation hardening	620 °C	—
Ageing	Temperature not stated	—
Ageing	620 °C	—

STEP	TEMPERATURE	MEDIUM
Solution annealing	Temperature not stated	—
source joins the operations with (or)		
Solution annealing	Temperature not stated	—
Annealing	Temperature not stated	—

Designations across standards

1 designations · 1 documented as identical

China	1
05Cr15Ni5Cu4Nb 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 05Cr15Ni5Cu4Nb

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