

06Cr18Ni12

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

OTHER DESIGNATIONS	PROPERTY VALUES
1 in 1 regions	10 on file

Chemical composition

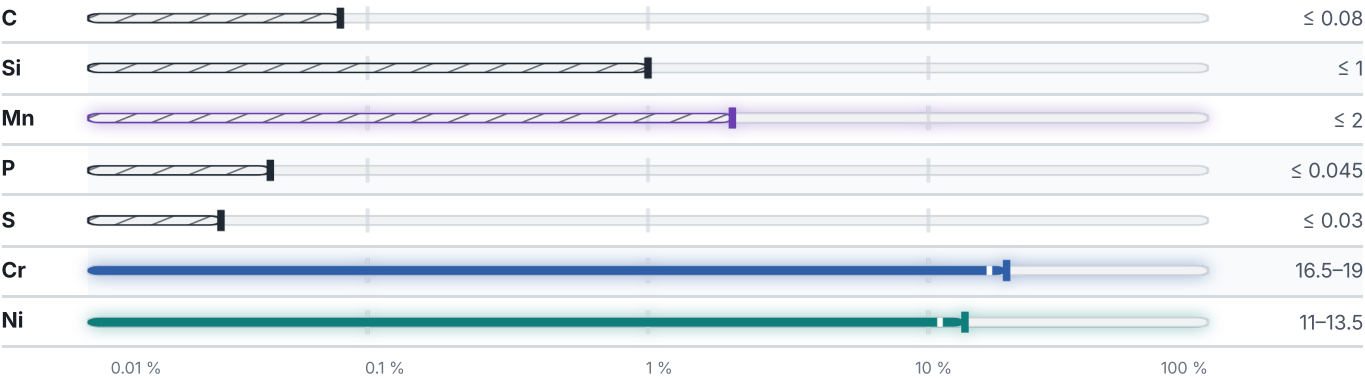
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 66.8 % ● Cr — 17.8 % ● Ni — 12.3 % ● Mn — 2 % ● Traces & impurities · 1.2 %

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

3 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ^{^-6} /K
20	200	—

CONDITION · DIMENSION	E GPa	ALPHA 10^-6/K
100	194	16
200	186	16.5
300	179	17
400	172	17.5
500	165	18

PROPERTY	VALUE	UNIT
Thermal conductivity	15	W/(m·K)
Specific heat capacity	500	J/(kg·K)
Electrical resistivity	730	nΩ·m

Designations across standards

1 designations · 1 documented as identical

China	1
06Cr18Ni12 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 06Cr18Ni12

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