

06Cr13

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

ELASTIC MODULUS 220 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 12 on file
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Chemical composition

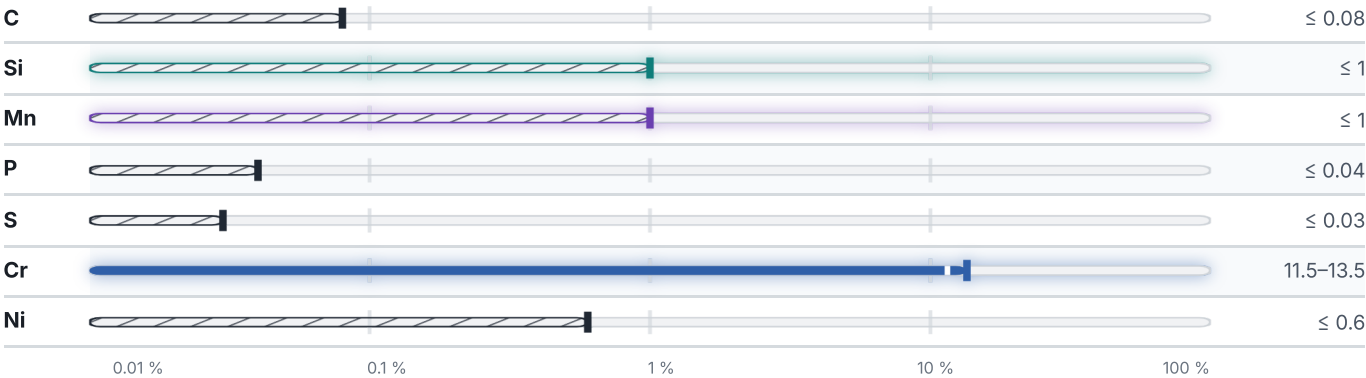
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 84.8 % ● Cr — 12.5 % ● 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	10.5	25	–
200	210	11	–	–
300	205	11.5	–	–
400	195	12	–	–
500	–	12	–	460
PROPERTY		VALUE	UNIT	
Elastic modulus		220	GPa	
Thermal expansion coefficient		10.6	10 ⁻⁶ /K	
Thermal conductivity		30	W/(m·K)	
Specific heat capacity		460	J/(kg·K)	
Electrical resistivity		600	nΩ·m	

Heat treatment

4 regimes

STEP	TEMPERATURE	MEDIUM
Annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—
Annealing	Temperature not stated	—
Annealing	Temperature not stated	—

Designations across standards

1 designations · 1 documented as identical

China	1
06Cr13 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 06Cr13

Quotation, availability, mill certificate or a technical question — directly on the material page.

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MATERIAL NO.

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ISSUED

Aug 15, 2026