

MATERIAL NUMBER 1.2083 · CLASS 1.2

X42Cr13

Material no. 1.2083

also listed as X40Cr14

Chemical composition, mechanical and physical property values, and 24 standard designations from 16 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 24 in 16 regions	PROPERTY VALUES 7 on file
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Chemical composition

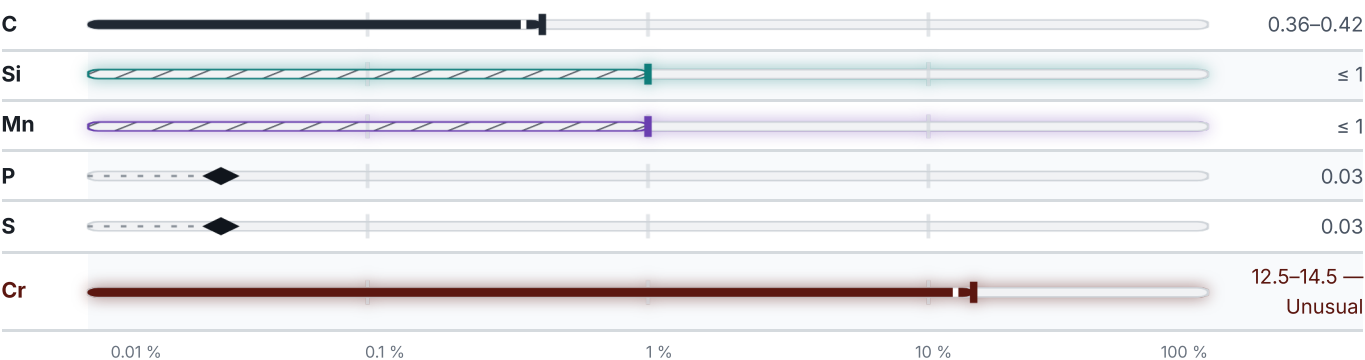
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 84.1 % ● Cr — 13.5 % ● Si — 1 % ● Mn — 1 % ● Traces & impurities · 0.4 %

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

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Mo.

Mechanical properties

1 values across 1 conditions

SOFT ANNEALED	HB
Soft annealed	241

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

24 designations · 2 documented as identical

United States	3	Spain	1
S42000	uns	F.3403	une
S42080	uns		
420	aisi-sae	International	1
		X40Cr14	iso
Poland	3	Japan	1
4H13	pn	SUS420J2	jis
4H13 jako grupa	pn		
4H14	pn	China	1
Europe	2	4Cr13	gb
X40Cr14 This grade's own name	din-en	Italy	1
X42Cr13 This grade's own name	din-en	X40Cr14	uni
France	2	Sweden	1
Z40C13	afnor	2304	ss
Z44C14	afnor		
Russia / CIS	2	Slovakia	1
40Ch13	gost	17 024	stn
40X13	gost		
Czechia	2	Brazil	1
17024	csn	420	abnt
17029	csn	Serbia	1
United Kingdom	1	Č.4175	srps
420S37	bs		

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 X42Cr13

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

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ISSUED

Aug 20, 2026