

MATERIAL NUMBER 1.4829 · CLASS 1.4

TP309S

Material no. 1.4829

also listed as X12CrNi22-12

Chemical composition, mechanical and physical property values, and 15 standard designations from 7 regions.

DENSITY**7.85** g/cm³**OTHER DESIGNATIONS****15** in 7 regions**PROPERTY VALUES****8** on file

Chemical composition

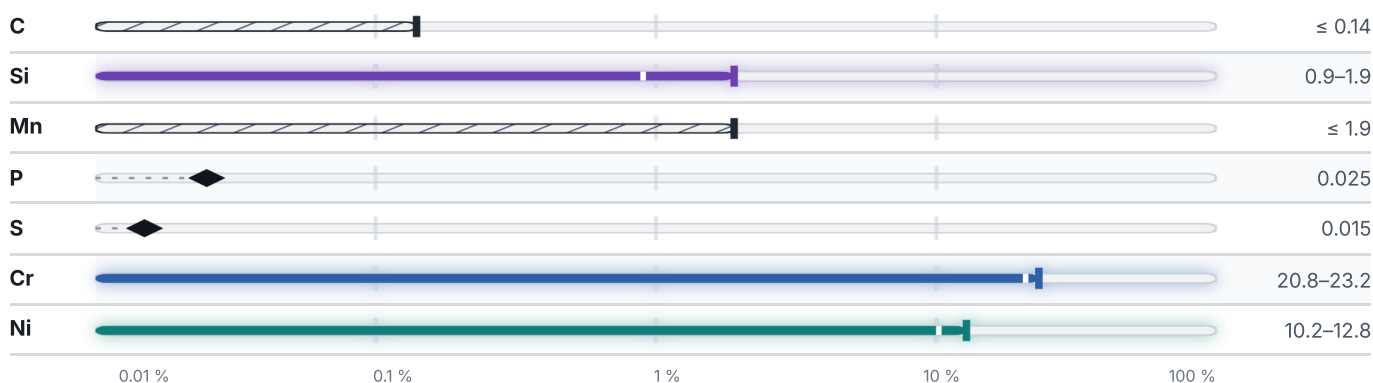
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 63 % ● Cr — 22 % ● Ni — 11.5 % ● Mn — 1.9 % ● Traces & impurities · 1.6 %

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

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

15 designations · 3 documented as identical

United States	5	Italy	2
S30309S	uns	AR 309	uni
S30980	This grade's own nameuns	X16CrNi23-14	uni
S30981	This grade's own nameuns		
309S	aisi-sae	Europe	1
TP309S	astm	X12CrNi22-12	This grade's own namedin-en
Russia / CIS	4	United Kingdom	1
20Ch23N13	gost	309S24	bs
20H23N13	gost		
20Kh23N13	gost	France	1
ЭИ319	gost	Z15CN24-13	afnor
		Poland	1
		H23N13	pn

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 TP309S

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	1.4829	Aug 20, 2026