SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.4307 · CLASS 1.4

ЭИ842

Material no. 1.4307

also listed as X2CrNi18-9

Chemical composition, mechanical and physical property values, and 88 standard designations from 13 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.9 g/cm³	88 in 13 regions	9 on file

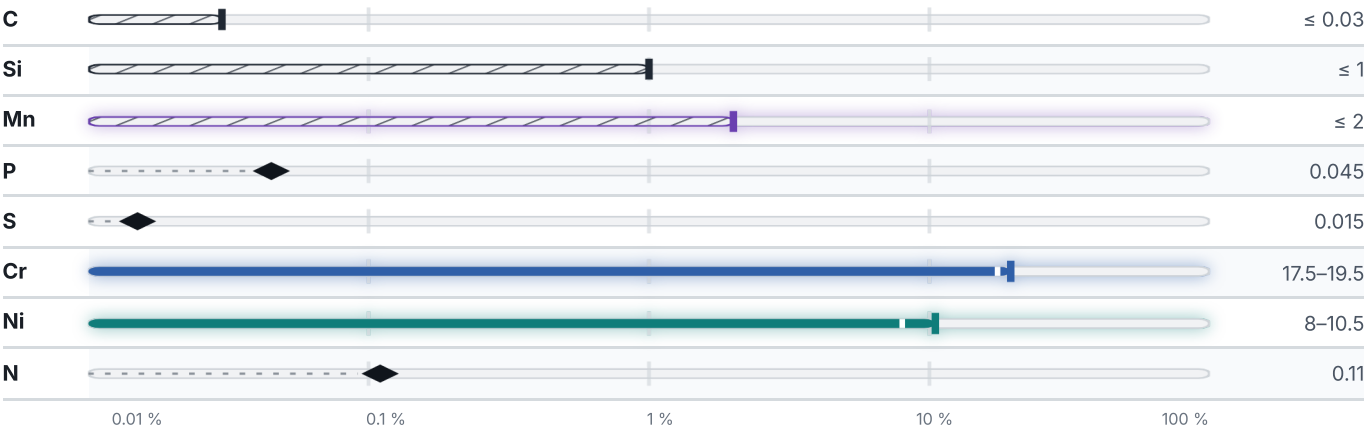
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 69.1 % · Cr — 18.5 % · Ni — 9.3 % · 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.

Mechanical properties

24 values across 6 conditions

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %	HB
Pipe cooling strain, GOST 9941-81	490	–	45	–	–
Pipe hot strain, GOST 9940-81	441	–	40	–	–
Forging, GOST 25054-81	441	157	38–40	45–50	–
04KH18N10 (04X18H10) , Forging GOST 25054-81	–	–	–	–	179

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	480	175	40	–	–	–
Hot-rolled	–	–	–	187	90	200

SOFT ANNEALED	HB
Soft annealed	215

SOLUTION ANNEALED	HB
Solution annealed	200

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %
Bar, GOST 5949-75	440	155	40	55

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %
Sheet trick, GOST 7350-77	490	175	45

Physical properties

1 values

CONDITION · DIMENSION	RHO g/cm³
20	7.9

PROPERTY	VALUE	UNIT
Density	7.9	g/cm³

Designations across standards

88 designations · 4 documented as identical

United States 59

S30300	uns
S30400	uns
S30403 This grade's own name	uns
S30453	uns
S30500	uns
303	aisi-sae
30304L	aisi-sae
304	aisi-sae
304L This grade's own name	aisi-sae
304LN	aisi-sae
305	aisi-sae
A 182 Grade F304L	astm
A 312 Grade TP304L	astm
A 403 Grade WP304L	astm
A1022	astm
A1040	astm
A182	astm
A213	astm
A240	astm
A249	astm
A269	astm
A270	astm
A276	astm
A312	astm
A314	astm
A358	astm
A368	astm
A403	astm
A409	astm
A473	astm
A478	astm
A479	astm
A493	astm
A511	astm
A554	astm
A580	astm
A632	astm
A666	astm
A688	astm
A774	astm
A778	astm
A793	astm
A813	astm
A814	astm
A851	astm
A924	astm
A943	astm
A965	astm
A988	astm
F2281	astm
F593	astm
F594	astm
F738	astm
F836	astm
F837	astm
F879	astm
F880	astm
TP304	astm
TP304L	astm

United States / Aerospace 7

5370	ams
5371	ams
5511	ams
5513	ams
5569	ams
5584	ams
5647	ams

France 5

Z2CN18	afnor
Z2CN18-10	afnor
Z3CN18	afnor
Z3CN18.10	afnor
Z3CN19-09	afnor

Russia / CIS 5

00Х18Н10	gost
04КН18N10	gost
04Х18Н10	gost
ЭИ842	gost
ЭП550	gost

Europe 2

1.4307	din-en
X2CrNi18-9 This grade's own name	din-en

Sweden 2

2352	ss
SIS 2352 This grade's own name	ss

Poland 2

00H18N10	pn
0H18N9	pn

United Kingdom	1
304S11	bs

Slovakia	1
17 287	stn

Japan	1
SUS304L	jis

Brazil	1
304 L	abnt

Czechia	1
17287	csn

Australia / New Zealand	1
304L	as-nzs

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 ЭИ842

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	1.4307	Aug 20, 2026