SteelEquivalents.com

Material datasheet
As of Sep 8, 2026

MATERIAL NUMBER 1.2067 · CLASS 1.2

Ch

Material no. 1.2067

also listed as 100Cr6

Chemical composition, mechanical and physical property values, and 53 standard designations from 20 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	53 in 20 regions	15 on file

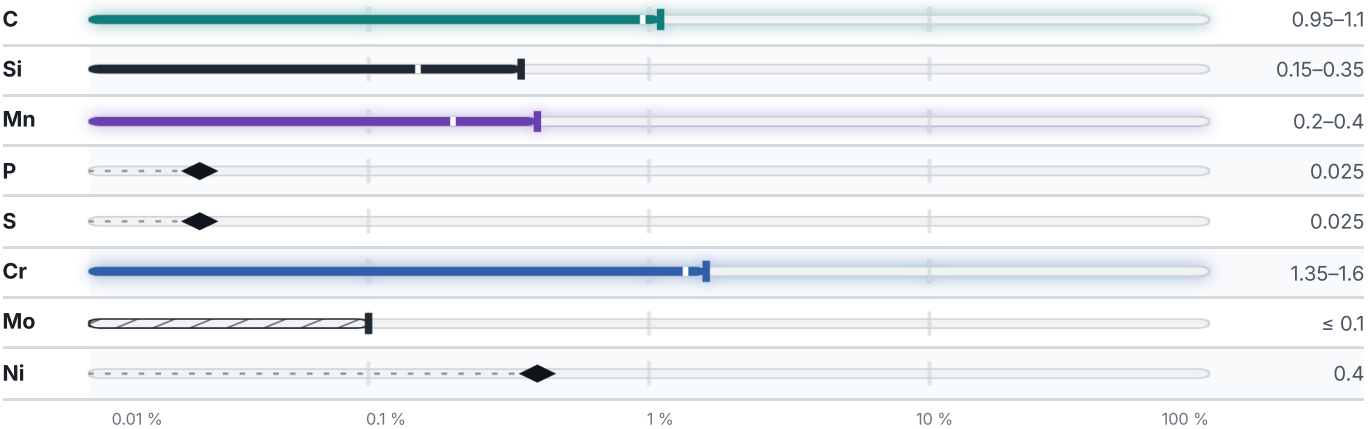
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 96.4 % · Cr — 1.5 % · C — 1 % · Ni — 0.4 % · Traces & impurities · 0.7 %

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

13 values across 7 conditions

SOFT ANNEALED	RM N/mm²	A80 %
0.3 – 3	750	11

CONDITION · DIMENSION	HB
Hot rolled	201

QUENCHED AND TEMPERED	RM N/mm²
0.3 – 3	1300–2100

SOFT ANNEALED	HB	HV
Soft annealed	223	235

QUENCHED AND TEMPERED	HV
Quenched and tempered	405–630

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %	KCU kJ/m²
Steel	590–730	370–410	20	45	440

CONDITION · DIMENSION	HB
SHKH15 (ШХ15) , GOST 801-78	179–207

Physical properties

7 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	RHO_EL nΩ·m
20	7.812	211	–	–	–
100	7.79	–	11.9	–	390
200	7.75	–	15.1	40	470
300	7.72	–	15.5	–	520
400	7.68	–	15.6	37	–
500	7.64	–	15.7	32	–

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	724	°C
Transformation point Ac3	900	°C

PROPERTY	VALUE	UNIT
Transformation point Ar3	713	°C
Transformation point Ar1	700	°C

Technological properties

PROPERTY	VALUE	UNIT
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	820–860 °C	Oil
Annealing	Temperature not stated	—

Designations across standards

53 designations · 5 documented as identical

United States — 12

AMS 6440	uns
G52986	uns
J19965 This grade's own name	uns
K23080	uns
S-22141	uns
T61203 This grade's own name	uns
52100	aisi-sae
E 52100	aisi-sae
L1	aisi-sae
L3 This grade's own name	aisi-sae
T61203	aisi-sae
A646	astm

United Kingdom — 4

2067	bs
534A99	bs
535A99	bs
BL3	bs

Spain — 4

100	une
100Cr6	une
Cr6	une
F.5230	une

China — 4

9SiCr	gb
Cr2	gb
CrV	gb
GCr15	gb

Europe — 3

1.2067	din-en
100Cr6 This grade's own name	din-en
102Cr6 This grade's own name	din-en

France — 3

100Cr6	afnor
100Cr6RR	afnor
Y100C6	afnor

Russia / CIS — 3

KH	gost
ShCh15	gost
ShKh15	gost

Poland — 3

ŁH15	pn
LH15	pn
NC4	pn

International	2
100Cr6	iso
3505	iso

United States / Aerospace	2
6440	ams
6444	ams

Italy	2
100Cr6	uni
102Cr6KU	uni

Czechia	2
14100	csn
14109	csn

Bulgaria	2
102Cr6	bds
Ch	bds

Japan	1
SUJ2	jis

Sweden	1
2258	ss

Slovakia	1
14 100	stn

Serbia	1
Č.4145	srps

Hungary	1
K4	msz

Austria	1
BOHLERK200	onorm

South Korea	1
STB2	ks

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 Ch

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	1.2067	Sep 8, 2026