

MATERIAL NUMBER 1.7039 · CLASS 1.7

1.7039

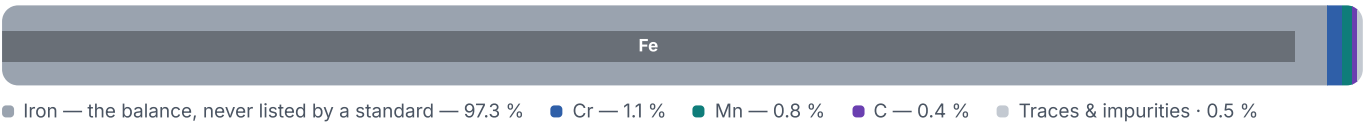
Chemical composition, mechanical and physical property values, and 20 standard designations from 13 regions.

DENSITY 7.72 g/cm³	OTHER DESIGNATIONS 20 in 13 regions	PROPERTY VALUES 7 on file
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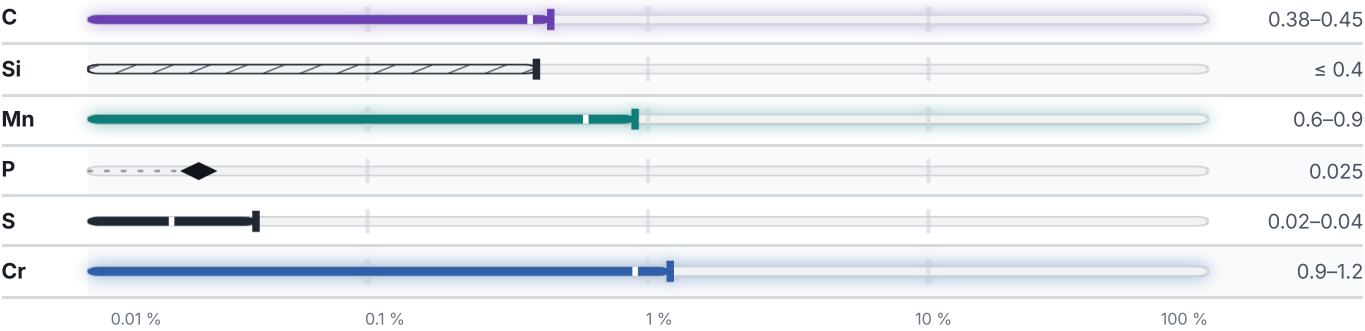
Chemical composition

Mass fraction in %

What this alloy is



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

5 values across 3 conditions

QUENCHED AND TEMPERED · ROUND PRODUCTS	A % · Lo = 5,65 √So
≤ 16	11
16 – 40	12

QUENCHED AND TEMPERED · ROUND PRODUCTS	A % · Lo = 5,65 √So
40 – 100	14
TREATED TO IMPROVE SHEARABILITY	HB
Treated to improve shearability	255
SOFT ANNEALED	HB
Soft annealed	241

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.72	g/cm ³

Heat treatment

2 regimes

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

Designations across standards

20 designations · 9 documented as identical

United States	4	Sweden	2
G51400	uns	2245	ss
H51400 This grade's own name	uns	SIS 2245 This grade's own name	ss
5140	aisi-sae		
5140H This grade's own name	aisi-sae	Europe	1
		41CrS4 This grade's own name	din-en
United Kingdom	2	France	1
530H40 This grade's own name	bs	42C4u	afnor
EN18 This grade's own name	bs		
Spain	2	International	1
42Cr41	une	41CrS4	iso
F 1207 This grade's own name	une		
Russia / CIS	2	Japan	1
40CH This grade's own name	gost	SCR 440H This grade's own name	jis
40KH	gost	Italy	1
		41Cr4	uni

Czechia	1	Hungary	1
14146ŽH	csn	Cr 3 E	msz
Serbia	1		
Č.4181	srps		

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 1.7039

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	1.7039	Aug 20, 2026