

MATERIAL NUMBER 1.0615 · CLASS 1.0

080A72

Material no. 1.0615

also listed as C70D

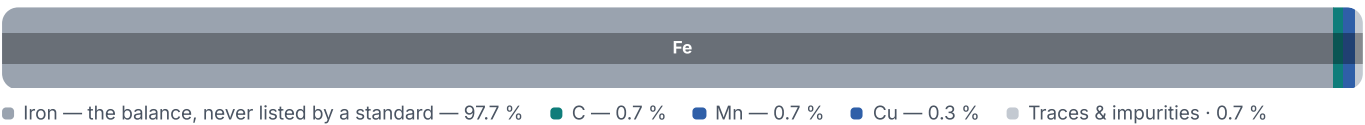
Chemical composition, mechanical and physical property values, and 8 standard designations from 7 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 8 in 7 regions	PROPERTY VALUES 18 on file
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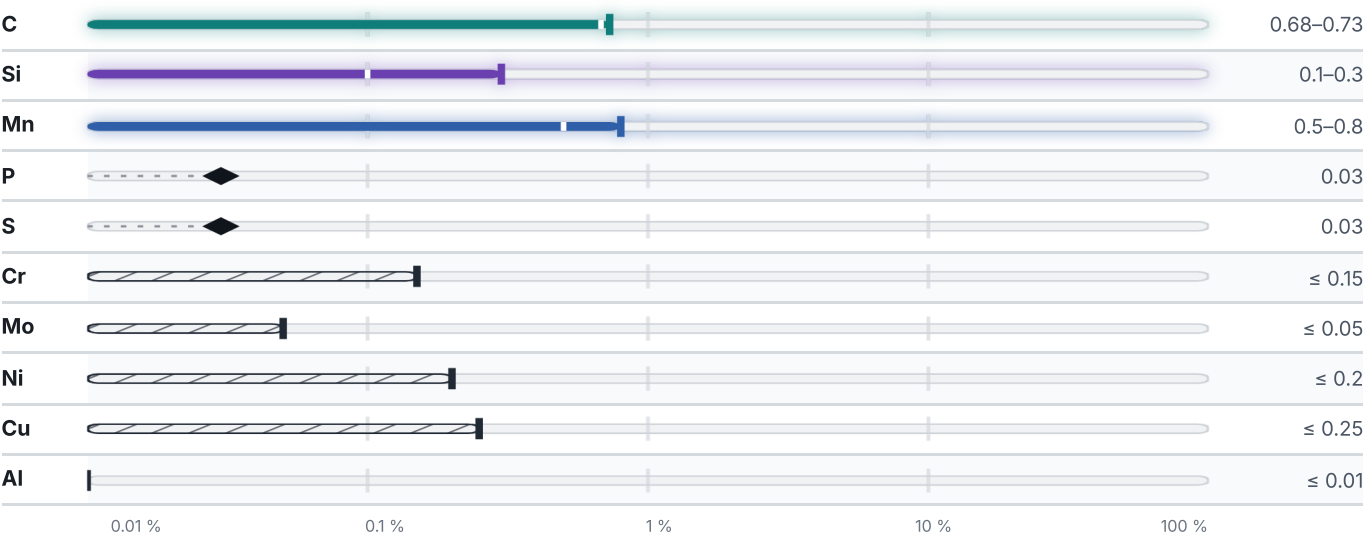
Chemical composition

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

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

9 values across 2 conditions

CONDITION · DIMENSION	RM N/mm²	A5 %	HB	
Band cold-worked , GOST 2284-79	740–1130	–	–	
Band annealed , GOST 2284-79	440–740	10	–	
(without heat treatment) , GOST 14959	–	–	269	
(annealing) , Sheet trick GOST 1577-93	–	–	229	
QUENCHING 830°C, OIL, DRAWING 470°C	RM N/mm²	RE N/mm²	A5 %	Z %
to Ø 80	1030	834	9	30

Physical properties

8 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)		CP J/(kg·K)
20	7.81	206	–	–		–
100	–	–	11.5	68		483
200	–	–	12.3	52		487
300	–	–	13	37		–
400	–	–	13.8	29		521
PROPERTY				VALUE	UNIT	
Density				7.85	g/cm³	
Transformation point Ac1				730	°C	
Transformation point Ac3				743	°C	
Transformation point Ar3				727	°C	
Transformation point Ar1				693	°C	

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	weakly predisposed	
Temper brittleness	not predisposed	

Designations across standards

8 designations · 3 documented as identical

United States	2	China	1
G10700	This grade's own name uns	70	gb
1070	This grade's own name aisi-sae		
Europe	1	Russia / CIS	1
C70D	This grade's own name din-en	70	gost
United Kingdom	1	Australia / New Zealand	1
080A72	bs	1070	as-nzs
		Bulgaria	1
		70	bds

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 080A72

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	1.0615	Aug 20, 2026