

MATERIAL NUMBER 1.0580 · CLASS 1.0

1.0580

Chemical composition, mechanical and physical property values, and 26 standard designations from 11 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 26 in 11 regions	PROPERTY VALUES 9 on file
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Chemical composition

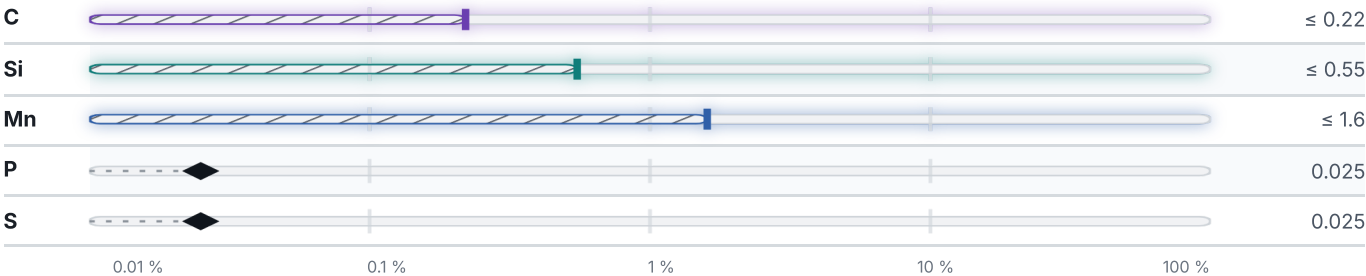
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.6 % ● Mn — 1.6 % ● Si — 0.6 % ● C — 0.2 % ● Traces & impurities · 0 %

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, Cr, Mo.

Mechanical properties

15 values across 2 conditions

AS ROLLED	REH N/mm ²	RM N/mm ²
≤ 16	355	490
16 – 40	345	490

AS ROLLED		REH N/mm ²	RM N/mm ²
40 – 65		335	490
65 – 100		–	470
65 – 80		315	–
80 – 100		295	–
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
Pipe, GOST 8731-87	588	304	14
Rolled stock, GOST 535-2005	590	295–315	12–15

Physical properties

4 values

CONDITION · DIMENSION			RHO g/cm³
20			7.85
PROPERTY	VALUE	UNIT	
Density	7.85	g/cm³	

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

26 designations · 5 documented as identical

Europe	5	France	4
1.0060	din-en	E335	afnor
E355 This grade's own name	din-en	ES355	afnor
S355GT This grade's own name	din-en	TS-47a	afnor
St 52 This grade's own name	din-en	TU526	afnor
St 52-3 This grade's own name	din-en		
United Kingdom	5	Czechia	3
CEW5	bs	11 523	csn
CFS5	bs	11483	csn
E335	bs	11600	csn
ERW5NKM	bs	United States	2
ERW5NZF	bs	1024 This grade's own name	aisi-sae
		Gr.65	aisi-sae

Italy	2	Sweden	1
E335	uni	1650	ss
Fe510	uni		
International	1	Poland	1
Fe590	iso	MSt6	pn
Russia / CIS	1	Austria	1
St6sp	gost	St60F	onorm

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 1.0580
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	1.0580	Aug 20, 2026