

MATERIAL NUMBER 1.2453 · CLASS 1.2

1.2453

Chemical composition, mechanical and physical property values, and 8 standard designations from 6 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 8 in 6 regions	PROPERTY VALUES 11 on file
------------------------------	---	--------------------------------------

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 92.9 % ● W — 5 % ● C — 1.3 % ● Mn — 0.3 % ● Traces & impurities · 0.5 %

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

1 values across 1 conditions

CONDITION · DIMENSION	HB
(annealing)	255

Physical properties

4 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	750	°C

Technological properties

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

Designations across standards

8 designations · 1 documented as identical

Russia / CIS	2	United States	1
KHV4F	gost	F2	aisi-sae
XB4Φ	gost		
Czechia	2	Japan	1
19 XXX NN	csn	SKS11	jis
19714	csn	Austria	1
Europe	1	K400	onorm
X130W5	This grade's own name	din-en	

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 1.2453

[Start an enquiry](#)

Quotation, availability, mill certificate or a technical question — directly on the material page.

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.2453

ISSUED

Aug 20, 2026