

MATERIAL NUMBER 1.5680 · CLASS 1.5

Z18N5

Material no. 1.5680

also listed as 12Ni19

Chemical composition, mechanical and physical property values, and 14 standard designations from 4 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	14 in 4 regions	8 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 93.9 % ● Ni — 5 % ● Mn — 0.6 % ● Si — 0.4 % ● Traces & impurities · 0.2 %

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: Cr, Mo.

Mechanical properties

4 values across 1 conditions

NORMALIZED	REH N/mm ²	RM N/mm ²	A %
≤ 30	390	—	—
30 – 50	380	—	—
≤ 50	—	510–710	19–20

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

14 designations · 7 documented as identical

United States		6	Europe		4
K41853	This grade's own name	uns	1.5680		din-en
2515		aisi-sae	12Ni19	This grade's own name	din-en
2517	This grade's own name	aisi-sae	X12Ni5	This grade's own name	din-en
A2512	This grade's own name	aisi-sae	Z10N05		din-en
E2515	This grade's own name	aisi-sae			
E2517	This grade's own name	aisi-sae			
			France		3
			5Ni390		afnor
			Z10N05		afnor
			Z18N5		afnor
			Czechia		1
			16527VN		csn

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 Z18N5

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

[Start an enquiry](#)

DATASHEET ONLINE

View the material page

GRADE SEARCH

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ISSUED

Aug 20, 2026