

MATERIAL NUMBER 1.0046 · CLASS 1.0

PAE320

Material no. 1.0046

also listed as S320GP

Chemical composition, mechanical and physical property values, and 3 standard designations from 3 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	3 in 3 regions	7 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.5 % ● Mn — 1.6 % ● Si — 0.6 % ● C — 0.2 % ● Traces & impurities · 0.1 %

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		1 values across 1 conditions
CONDITION · DIMENSION		A % · Lo = 5,65 √So
≤ 16		23

Physical properties			1 values
PROPERTY	VALUE	UNIT	
Density	7.85	g/cm³	

Designations across standards				3 designations · 1 documented as identical	
Europe		1	Belgium		1
S320GP	This grade's own name	din-en	PAE320		nbn
France		1			
E320SP		afnor			

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 PAE320

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	1.0046	Aug 20, 2026