

PK70X3-6.4

also listed as 70S3A

Chemical composition, mechanical and physical property values, and 10 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
10 in 1 regions	13 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 95.2 % ● Si — 2.6 % ● Mn — 0.8 % ● C — 0.7 % ● Traces & impurities · 0.8 %

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: Mo.

Mechanical properties

6 values across 2 conditions

CONDITION · DIMENSION	HB			
(annealing) , GOST 14959-79	269			
(without heat treatment) , GOST 14959	302			
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %
Rolled stock, GOST 14959-79	1670	1470	6	25

Physical properties

5 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)
20	214	–	25	–
100	208	11.4	26	480
200	198	12.3	27	510
300	192	12.8	28	520
400	185	13.3	29	535
500	180	13.7	29	565
600	152	14.1	29	585
700	139	14.3	28	620
800	132	12.8	27	700
PROPERTY	VALUE		UNIT	
Transformation point Ac1	765		°C	
Transformation point Ac3	780		°C	

Technological properties

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

Designations across standards

10 designations · 1 documented as identical

Russia / CIS	10
70S3A This grade's own name	gost
70C3A	gost
PK70D3	gost
PK70Kh3	gost
PK70Д3-6.0	gost
PK70Д3-6.4	gost
PK70Д3-6.8	gost
PK70Д3-7.4	gost
PK70X3-6.4	gost
PK70X3-6.8	gost

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 PK70X3-6.4

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	—	Aug 15, 2026