

09G2SD

also listed as SB49

Chemical composition, mechanical and physical property values, and 7 standard designations from 2 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
7 in 2 regions	7 on file

Chemical composition	Mass fraction in %
No chemical composition is on file for this material number.	

Predicted transformation temperatures
Not enough recorded composition to predict a transformation temperature for this grade — missing: C, Mn, Si, Ni, Cr, Mo.

Mechanical properties	6 values across 2 conditions		
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
4	450	310	21
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
to 140	480	345	21

Physical properties	7 values	
PROPERTY	VALUE	UNIT
Transformation point Ac1	720	°C
Transformation point Ac3	830	°C
Transformation point Ar3	710	°C

PROPERTY	VALUE	UNIT
Transformation point Ar1	620	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

7 designations · 1 documented as identical

Russia / CIS		5	Japan		2
09G2		gost	SB49		jis
09G2D		gost	SM41B		jis
09G2FB		gost			
09G2SD		gost			
09Г2С	This grade's own name	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 09G2SD

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