

MATERIAL NUMBER 1.3247 · CLASS 1.3

BM42

Material no. 1.3247

also listed as HS2-9-1-8

Chemical composition, mechanical and physical property values, and 28 standard designations from 14 regions.

DENSITY 8.01 g/cm³	OTHER DESIGNATIONS 28 in 14 regions	PROPERTY VALUES 11 on file
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Chemical composition

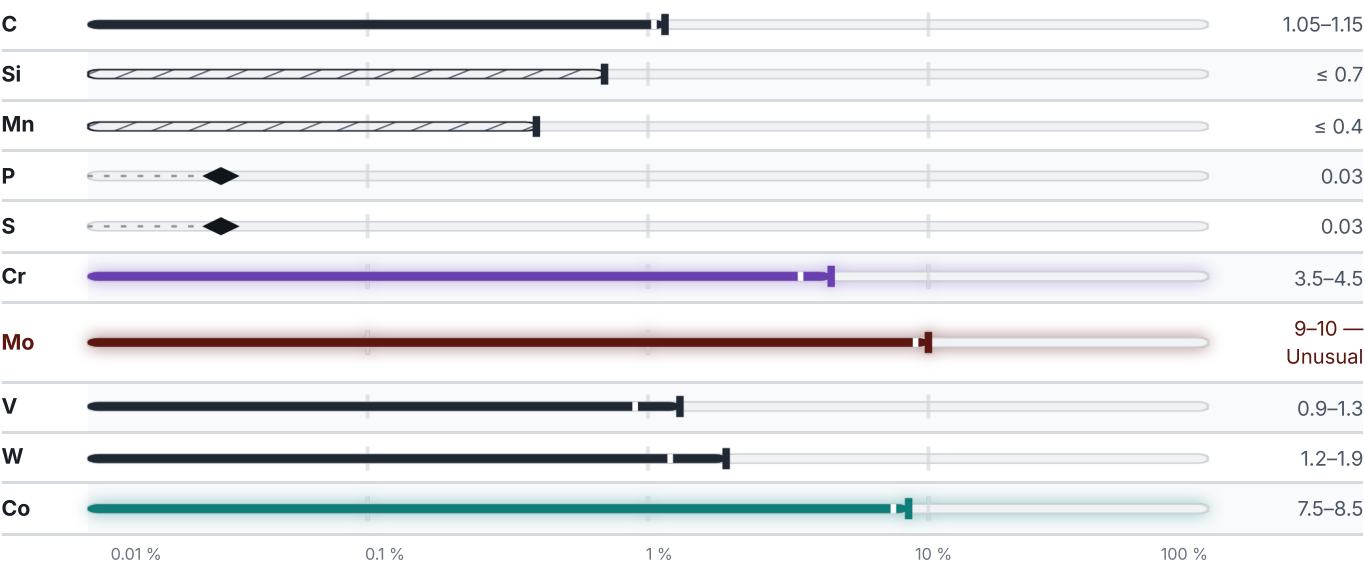
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 73.6 % ● Mo — 9.5 % ● Co — 8 % ● Cr — 4 % ● Traces & impurities · 4.9 %

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.

Mechanical properties

3 values across 3 conditions

CONDITION · DIMENSION	HB
Annealed	277
SOFT ANNEALED	HB
Soft annealed	277
CONDITION · DIMENSION	HB
(annealing) , GOST 19265-73	285

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	8.01	g/cm³

Heat treatment

4 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Preheating	800–900 °C	—
Quenching	1170–1190 °C	—
Tempering	550 °C	—
Annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—
Annealing	Temperature not stated	—

Designations across standards

28 designations · 5 documented as identical

United States8		Spain2		
T11342	This grade's own nameuns	7-4-2-5	une	
T11342 / T11842uns		F.5615	une	
M30	aisi-sae	International1	HS2-9-1-8iso	
M42	This grade's own nameaisi-sae			
M47	aisi-sae	Japan1	SKH59jis	
T11330	aisi-sae			
T11342	aisi-sae	China1	W2Mo9Cr4VCo8gb	
T11347	aisi-sae			
Russia / CIS4		Italy1		
R2AM9K	gost	HS2-9-1-8uni	Poland1	
R2M10K8	gost			
R2AM9K5	gost	Hungary1	R11msz	
P2AM9K5	gost			
Europe2		Bulgaria1		
HS2-9-1-8	This grade's own namedin-en	South Korea1	SKH59This grade's own nameks	
S 2-10-1-8	This grade's own namedin-en			
United Kingdom2				
BM42	bs			
BT42	bs			
France2				
HS2-9-1-8	afnor			
Z110DKCWV09-08-04-02-01	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 BM42

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	1.3247	Aug 20, 2026