

Database of Steel and Alloy (Marochnik)

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[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Copper](#)

Characteristics for grade M00b (M006).

Grade :	M00b (M006)
Classification :	Copper
Equivalent grades:	Go here

Chemical composition in % for grade M00b (M006)

Fe	Ni	S	P	Cu	As	Pb	Zn	Ag	O	Sb	Bi	Sn
max 0.001	max 0.001	max 0.001	max 0.0003	min 99.99	max 0.001	max 0.001	max 0.001	max 0.002	max 0.001	max 0.001	max 0.0005	max 0.001

Mechanical properties under T=20°C for grade M00b (M006)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			200-250	90-150	60			
hard			400-490	300-450	6			

Brinell hardness for M00b (M006) , soft	HB 10 ⁻¹ = 45 MPa
Brinell hardness for M00b (M006) , hard	HB 10 ⁻¹ = 110 MPa

Technological properties of the material M00b (M006) .

Melting temperature :	1083 °C
Casting temperature :	1150 - 1250 °C
Linear shrinkage :	2.1 %

Physical properties for grade M00b (M006)

T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹
Grade	MPa	1/Grade	Watt/(m·Grade)	kg/m ³	J/(kg·Grade)	Ohm·m
20	1.28		387	8940	390	17.8
100	1.32	16.7				

Equivalent steels for grade M00b (M006)

Warning! Indicated both exact and nearest equivalents.

USA

C10100

Specification :
Mechanical properties :

σ_B	- Tensile strength , [MPa]
σ_T	- Yield stress , [MPa]
δ_5	- Specific elongation at fracture , [%]
ψ	- Reduction of area , [%]
KCU	- Impact strength , [kJ / m ²]
HB	- Brinell hardness , [MPa]

Physical properties :

T	- Test temperature , [Grade]
E	- Young modulus , [MPa]
α	- Coefficient of linear expansion (range 20° - T) , [1/Grade]
λ	- Thermal (heat) condition coefficient , [Watt/(m·Grade)]
ρ	- Density , [kg/m ³]
C	- Specific heat (range 20° - T) , [J/(kg·Grade)]
R	- Electrical resistance , [Ohm·m]

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more then 2500 steels and alloys (stainless steel, alloy steel, carbone steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).
 Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

[Top](#)

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