

Database of Steel and Alloy (Marochnik)

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Characteristics for grade BrO8TS4 (БpO8Ц4).

Grade :	BrO8TS4 (БpO8Ц4)
Classification :	Tin foundry bronzes
Equivalent grades:	Go here

Chemical composition in % for grade BrO8TS4 (БpO8Ц4)

Fe	Si	P	Al	Cu	Pb	Zn	Sb	Sn	Impurity	-
max 0.3	max 0.02	max 0.05	max 0.02	84 - 89	max 0.5	4 - 6	max 0.3	7 - 9	all 1	Si + Al < 0.02 %

Comment: Cu is a basis; the percentage of Cu is given approximately.

Mechanical properties under T=20°C for grade BrO8TS4 (БpO8Ц4)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
cast in a metal mould, GOST 613-79			196		10			Without heat treatment
sand (mould) casting, GOST 613-79			196		10			Without heat treatment

Brinell hardness for BrO8TS4 (БpO8Ц4) (without heat treatment), GOST 613-79	HB 10 ⁻¹ = 75 MPa
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Friction coefficient of the material BrO8TS4 (БpO8Ц4).

Friction coefficient with oil :	0.006
Friction coefficient without oil :	0.3

Technological properties of the material BrO8TS4 (БpO8Ц4).

Melting temperature :	1000 °C
Casting temperature :	1100 - 1150 °C
Linear shrinkage :	1.47 %

Physical properties for grade BrO8TS4 (БpO8Ц4)

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	0.98	16.6	68.2	8800	356	135

Equivalent steels for grade BrO8TS4 (БpO8Ц4)

Warning! Indicated both exact and nearest equivalents.

USA
-
C90300

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 / m²]
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/m³]
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

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