

Database of Steel and Alloy (Marochnik)

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Characteristics for grade V95 (B95).

Grade :	V95 (B95) (1950)
Classification :	Aluminium wrought alloys
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Chemical composition in % for grade V95 (B95)

Fe	Si	Mn	Ni	Cr	Ti	Al	Cu	Mg	Zn	Impurity
max 0.5	max 0.5	0.2 - 0.6	max 0.1	0.1 - 0.25	max 0.05	86.3 - 91.5	1.4 - 2	1.8 - 2.8	5 - 7	other, each 0.05; all 0.1

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

Mechanical properties under T=20°C for grade V95 (B95)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Pipe, GOST 18482-79			490-510	375-400	5-7			
Bar, GOST 21488-97			490-530	390-420	4-6			Quenching and artificial aging
Bar, GOST 51834-2001			550-570	480-490	6			Quenching and artificial aging
Band annealed , GOST 13726-97			245		10			
Profile annealed , GOST 8617-81			275		10			
Profile, GOST 8617-81			510-520	451-461	6			
Plate , GOST 17232-99			470-490	390-410	2-4			Quenching and artificial aging

Brinell hardness for V95 (B95) ,	HB 10 ⁻¹ = 125 MPa
Brinell hardness for V95 (B95) (quenching, ageing) ,	HB 10 ⁻¹ = 150 MPa

Physical properties for grade V95 (B95)

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	0.74			2850		
100		23.2				

Equivalent steels for grade V95 (B95)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Poland	Czechia	Austria	Switzerland	Inter
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	PN	CSN	ONORM	SNV	ISO
7075 A97075 AA7075	3.4365 AlZnMgCu1.5	7075	7075 A- Z5GU	7075 L95 L96	ENAW-7075 ENAW- AlZn5.5MgCu	AlZn5.8MgCuCr P- AlZn5.8MgCuCr	AlZn6Mg2Cu	424222	AlZn6Mg2Cu1.5 AlZnMgCu1.5	AlZnMgCu	AlZn5.5MgCu AlZn6MgCu

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 than 2500 steels and alloys (stainless steel, alloy steel, carbon 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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