

Database of Steel and Alloy (Marochnik)

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Characteristics for grade AL26 (АЛ26).

Grade :	AL26 (АЛ26)
Classification :	Aluminium casting alloys
Equivalent grades:	Is absent

Chemical composition in % for grade AL26 (АЛ26)

Fe	Si	Mn	Ni	Cr	Al	Cu	Mg	Zn	Sn	Impurity
max 0.7	20 - 22	0.4 - 0.8	1 - 2	0.1 - 0.4	70.7 - 76.6	1.5 - 2.5	0.4 - 0.7	max 0.3	max 0.01	all 0.9

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

Mechanical properties under T=20°C for grade AL26 (АЛ26)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
cast in a metal mould			160					

Brinell hardness for AL26 (АЛ26) , cast in a metal mould	HB 10 ⁻¹ = 90 MPa
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Technological properties of the material AL26 (АЛ26) .

Casting temperature :	810 °C
Linear shrinkage :	1.05 %

Physical properties for grade AL26 (АЛ26)

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				2680		
100		17				

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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