

Chemical Composition Limits (in %)

Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Other elements	
								Each	Total
0,1	4,0 4,9	0,4	0,4	0,4 1,0	0,25	0,15	0,05 0,25	0,05	0,15

Outstanding Characteristics:

High strength after welding.
Very resistant to sea water and industrial atmosphere.

Standard Commodities:

Plate; sheet; extrusions.

Typical Uses:

Shipbuilding; car bodies, railway waggons.
Recommended for pressure vessels and low temperature applications. Structural plate for mine skips and cages. Tipper and dumper bodies.

Typical Physical Properties

Density	2,65	g/cm ³
Modulus of Elasticity	72	GPa
Modulus of Rigidity	27	GPa
Melting Range	570-640	°C
Specific heat between 10-100°C (273-373 K)	0,97	
Coefficient of linear expansion between 20-200°C (293-473K)	25 x 10 ⁻⁶	/K
Thermal Conductivity at 25°C (298 K)	121-126	W/mK
Resistivity at 20°C (293 K)	0,058 x 10 ⁻⁶	Ωm

Other Characteristics

Corrosion Resistance	:	Excellent
Weldability	:	Good
Formability	:	Good (in 0 temper)
Machinability	:	Fair
Anodising	:	Good (natural only)
Brazeability	:	Not recommended

Mechanical Properties

Commodity and Temper	Gauge mm	0,2% Proof Stress MPa	Ultimate Tensile Strength Mpa	Elongation A5 %	Brinell Hardness HB	Ultimate Shear Strength MPa
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Sheet

F	3,0 -100,0	125 (-) 380	275 (-) 450			
O	0,7 - 80,0	125 (-) 200	275 (-) 350	16*		
H22	0,2 - 6,6	235 (-) 345	310 (-) 375	8-10*		
H24	0,6 - 6,0	270 (-) 380	345 (-) 405	6-8*		

* 50 mm gauge length; sheet - thickness over 1,3 mm

Annealing

Temperature °C	Time h
350 ± 3	2-3 (to soften permanently)