

Usages: EN 13195: Specifications for wrought products for marine applications

EN 602: Usage for food industry

Data Sheet: Internal alloy name: 6060

EN AW 6060 - Profiles International alloy name: **EN AW 6060** EN AW - AIMgSi **Chemical Symbol:**

DIN-Werkstoff no.: Alumeco A/S

Heat treatable alloy Alloy type:

Main properties: Main usage: Important norms and literature:

Constructions

 Very good atmospheric corrosion resistance
 Very good workability Anodizing in general Automotive

Extrusion:
EN755-1: Technical conditions for inspection and delivery
EN755-2: Mechanical properties
Series EN755-3 to EN755-9: Tolerances on dimensions and forms for different Decoration anodisation
Heat treatable alloys (Soft T4 Forgings Marine and offshore temper)

extrusions

Chemical composition: EN573-3: Chemical composition

Chemical composition, EN573-3:2009

011011110a	onomical composition Error of 2000										
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Other e	elements together	
0.30-0.6	0.10-0.30	0.10	0.10	0.35-0.6	0.05	0.15	0.10	N/A	0.05	0.15	

Typical mechanical properties, EN755 - 2

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Product group	Temper	Rm	Rp _{0,2}	Α	Hardness*
Dimension (mm)		MPa	MPa	%	НВ
Rod/Bar ≤ 150	T4	Min. 120	Min. 60	16	50
Rod/Bar ≤ 150	T6	Min. 190	Min. 150	8	70
Rod/Bar ≤ 150	T66	Min. 215	Min. 160	8	75
Tubes Wall thickness ≤ 15	Т6	Min. 190	Min. 150	8	70
Profiles Wall thickness ≤ 25	T4	Min. 120	Min. 60	16	50
Profiles Wall thickness 3 < t ≤ 25	Т6	Min. 170	Min. 140	8	70
Profiles Wall thickness 3 < t ≤ 25	T66	Min. 195	Min. 150	8	75

^{*} Information values only;

Physical properties:

Density g/cm³	Solidification range	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature	E - modulus (N / mm²)
2,70	645-658	54	209	23,4	300°c	69.500

Typical Alumeco products with this alloy

- Bars in various dimensions and form
- Angle profiles
- Tubes Profiles

Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)

Resistance:	Weldability	Machinability	Anodizing:
Corrosion index, general: 3	TIG welding: 2	Machinability index: 3	Decorative anodizing surface treatment: 3
Marine Atm. Corr index: 3	MIG welding: 2	•	Protective anodizing index: 3
			Hard anodizing: 3
Hot workability:		Tips on machinability:	Color anodizing: 3
Extrusion: 3	<u>Solderability</u>		
Forging: 3	Brazability index: 2		
	Solderability index: 2		General Information:
Cold formability:	,		
Cold formability general: 2			
Deep drawing: 1			
Bending: 2 – 3 (Depending on			
the temper)			