

Data Sheet		Internal alloy name: 6063									
EN AW 6063 - Profiles		International alloy name: EN AW 6063									
Alumeco A/S		Chemical Symbol: EN AW – AlMg0,7Si									
		DIN-Werkstoff no.: 3.3208									
		Alloy type: Heat treatable alloy									
Main usage	Main properties	Important norms and literature									
<ul style="list-style-type: none"> • Constructions • Anodizing in general • Automotive • Forgings • Marine and offshore 	<ul style="list-style-type: none"> • Very good atmospheric corrosion resistance • Very good workability • Decoration anodisation • Heat treatable alloys (Soft T4 temper) 	Extrusion: EN 755-1: Technical conditions for inspection and delivery EN 755-2: Mechanical properties Series EN 755-3 to EN 755-9: Tolerances on dimensions and forms for different extrusions Chemical composition: EN 573-3: Chemical composition									
Usages: EN 13195: Specifications for wrought products for marine applications EN 602: Usage in the food industry											
Chemical composition (%) EN 573-3											
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other elements Each together			
0.20-0.60	0.35	0.10	0.10	0.45-0.90	0.10	0.10	0.10	0.05	0.15		
Typical mechanical properties EN 755 - 2											
Product group	Temper		Rm		Rp0,2		A		Hardness*		
Dimension (mm)			MPa		MPa		% min.		HB		
Rod/Bar ≤ 150	T4		Min. 130		Min. 65		14		50		
Rod/Bar ≤ 150	T6		Min. 215		Min. 170		10		75		
Tubes	T6		Min. 215		Min. 170		10		75		
Wall thickness ≤ 25											
Profiles	T4		Min. 130		Min. 65		14		50		
Wall thickness ≤ 25											
Profiles	T6		Min. 215		Min. 170		8		75		
Wall thickness ≤ 10											
* Information values only											
Physical properties											
Density	Solidification	Electrical	Thermal	Thermal	Annealing	E - modulus					
g/cm ³	range	conductivity	conductivity	expansion	temperature °C	(N / mm ²)					
2.70	°C	%IACS	W/m K	(µm m ⁻¹ K ⁻¹)							
	615-655	52	201	23.5	350-400	69,500					
Typical Alumeco products with this alloy											
<ul style="list-style-type: none"> • Bars in various dimensions and form • Angle profiles • Tubes • Profiles • Customized profiles 											
Properties and information (3 high/good; 2 medium; 1 poor/bad)											
<u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3			<u>Weldability</u> TIG welding: 2 MIG welding: 2			<u>Machinability</u> Machinability index: 1			<u>Anodizing</u> Decorative anodizing surface treatment: 3 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 3		
<u>Hot workability</u> Extrusion: 3 Forging: 3			<u>Solderability</u> 2								
<u>Cold formability</u> Cold formability general: 2 Deep drawing: 1 Bending: 2 – 3 (Depending on the temper)											