

Data Sheet					Internal alloy name: 2007						
EN AW 2007 – Rods and bars					International alloy name: EN AW 2007						
Alumeco A/S					Chemical Symbol: EN AW – AlCu4PbMgMn						
Main usage					DIN-Werkstoff no.: 3.1645						
Main properties					Alloy type: Heat treatable alloy						
- Forming - Mechanical Engineering - Tools					Important norms and literature Extruded: EN 755-1: Technical conditions for inspection and delivery EN 755-2: Mechanical properties EN 755-3: Tolerances on dimensions and form round bars EN 755-6 Tolerances on dimensions and form hexagonal bars Cold drawn: EN 754-1: Technical conditions for inspection and delivery EN 754-2: Mechanical properties EN 754-3: Tolerances on dimensions and form round bars EN 754-6 Tolerances on dimensions and form hexagonal bars Chemical composition: EN 573-3: Chemical composition Rolled products: EN 485-1: Technical conditions for inspection and delivery EN 485-2: Mechanical properties EN 485-3: Tolerances on dimensions and form hot rolled products EN 485-4: Tolerances on dimensions and form cold rolled products						
Chemical composition (%) EN 573-3											
Si	Fe	Cu	Mn	Mg	Zn	Bi	Pb	Sn	Other elements		
0.8	0.8	3.3-4.6	0.50-1.0	0.40-1.8	0.8	0.20	0.8-1.5	0.20	Each together		
0.10	0.30										
Typical mechanical properties EN 754-2 - Drawn											
Diameter range (mm)		Temper		Rm MPa		Rp0,2 MPa		A %			
Hardness* HB		30 up to 80		T3		Min. 340		Min. 220			
6		95									
Typical mechanical properties EN 755-2 - Extruded											
≤ 80		T4		Min. 370		Min. 250		8			
80 < D ≤ 200		T4		Min. 340		Min. 220		8			
* Information values only											
Physical properties											
Density g/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m⁻¹ K⁻¹)	Annealing temperature °C	E - modulus (N / mm²)					
2.85	540 - 645	34	130 - 150	24	350-400	73,000					
Typical Alumeco products with this alloy											
- Round bars with the diameter from 10 – 100 mm - Diameter below 50 mm is typically extruded / drawn and above is it only extruded - Not standard, but can be found as sheets with the thickness 1 – 10 mm											
Properties and information (3 high/good; 2 medium; 1 poor/bad)											
<u>Resistance</u> Corrosion index, general: 1 Marine atm. corr. index: 1			<u>Weldability</u> TIG welding: 1 MIG welding: 1			<u>Machinability</u> Machinability index: 3			<u>Anodizing</u> Decorative anodizing surface treatment: 1 Protective anodizing index: 2 Hard anodizing: 2 Color anodizing: 1		
<u>Hot workability</u> Extrusion: 2 Forging: 2			<u>Solderability</u> 1			<u>Tips regarding machining</u> Tension/deformation is possible to occur					
<u>Cold formability</u> Cold formability general: 1 Deep drawing: 1 Bending: 1											