

Data Sheet					Internal alloy name: 2011				
EN AW 2011 – Rods and bars					International alloy name: EN AW 2011				
Alumeco A/S					Chemical Symbol: EN AW – AlCu6BiPb				
					DIN-Werkstoff no.: 3.1655				
					Alloy type: Heat treatable alloy				
Main usage		Main properties			Important norms and literature				
- Forming - Forging - Mechanical Engineering - Tools		- High strength material - Good machinability - Low corrosion resistance			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	Other elements	
								Each	together
0.40	0.7	5.0-6.0	-	-	0.30	0.20-0.6	0.2-0.39	0.05	0.15
Typical mechanical properties EN 754-2 - Drawn									
Diameter range (mm)		Temper		Rm MPa		Rp0,2 MPa		A %	
≤ 80		T8		Min. 370		Min. 270		8	
								Hardness* HB	
								115	
Typical mechanical properties EN 755-2 - Extruded									
≤ 75		T6		Min. 310		Min. 230		8	
75 < D ≤ 150		T6		Min. 295		Min. 195		6	
* 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)	
2.84	540 - 645		45.5	172	23		350-400	72,500	
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)									
Resistance Corrosion index, general: 1 Marine atm. corr. index: 1 Hot workability Extrusion: 2 Forging: 2 Cold formability Cold formability general: 1 Deep drawing: 1 Bending: 1		Weldability TIG welding: 1 MIG welding: 1 Solderability 1		Machinability Machinability index: 3 Tips regarding machining Tension/deformation is possible to occur			Anodizing Decorative anodizing surface treatment: 1 Protective anodizing index: 2 Hard anodizing: 2 Color anodizing: 1		