

Data sheet EN Cu-ETP/CW004A – Rolled products 99,9 % pure copper Alumeco A/S		Internal alloy name: CW004A International alloy name: EN Cu-ETP DIN-Werkstoff no.: 2.0060 Alloy type: Electrical conducting Revision date: 13-01-2021					
Main usage <ul style="list-style-type: none"> • Automotive • Builders Hardware • Consumer • Electrical • Fasteners • Industrial 	Main properties <ul style="list-style-type: none"> • High thermal and electrical conductivity • It has excellent forming properties 	Important norms and literature Rolled products EN1652: Copper and copper alloys - Plate, sheet, strip and circles for general purposes EN 13599 - copper plates, sheets & strips					
		Chemical composition (%) EN 13599					
Cu	Bi	Pb	O	Other elements Each together			
99.90	Max. 0.0005	Max. 0.005	Max. 0.040	- 0.03			
Typical mechanical properties EN 13599							
Material condition	Thickness range (mm)	Rm MPa	Rp_{0,2} MPa	A_{50mm} for thickness up to 2,5mm %	A for thickness up to 2,5mm %	Hardness HBW	Hardness HV
R220 (soft)	0,1 - 5	220 - 260	Max. 140	33	42	-	-
R240(1/2 hard)	0,10 – 10	240 - 300	Min. 180	8	15	-	-
R290 (3/4 hard)	0,10 - 10	290 - 360	Min. 250	4	6	-	-
* Information values only							
Physical properties							
Density (20 °C) g cm⁻³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity (20 °C) W m⁻¹ K⁻¹	Thermal expansion (20-300 °C) µm m⁻¹ K⁻¹	Annealing temperature °C	E - modulus (20 °C) N mm⁻²	
9,0	1070	100	390	17		-	
Properties and information							
Fabrication Properties				Joining Methods			
Hot Formability		Good		Soldering		Excellent	
Cold Formability		Excellent		Brazing		Good	
				Oxy-acetylene welding		Less Suitable	
				Gas-shielded arc welding		Less Suitable	