

<b>Data sheet</b>  <b>CW118C</b> <b>EN Cu-TeP</b>  <b>Alumeco A/S</b>		<b>Internal alloy name:</b> CW118C <b>International alloy name:</b> EN Cu-TeP <b>DIN-Werkstoff no.:</b> 2.1546 <b>Alloy type:</b> Electrical conducting <b>Revision date:</b> 14-01-2021						
<b>Main usage</b> <ul style="list-style-type: none"> <li>• Electrical</li> <li>• Bases for diodes and thyristors</li> <li>• Torch tips in gas welding</li> <li>• Screws</li> <li>• Small parts in electronics</li> <li>• Pipe connections</li> <li>• Fittings</li> </ul>	<b>Main properties</b> <ul style="list-style-type: none"> <li>• Very good conductivity</li> <li>• Very good Turning properties</li> </ul>	<b>Important norms and literature</b>  <b>Extruded products</b> EN 13601: Copper and copper alloys - Copper rod, bar and wire for general electrical purposes.						
<b>Chemical composition (%) DIN EN 12164</b>								
Cu	P	Te	Other elements Each together					
Rest.	0,003-0,012	0,4-0,7	- 0.1					
<b>Typical mechanical properties DIN EN 12164</b>								
Material condition	Thickness range (mm)	Width range (mm)	R <sub>m</sub> N/mm <sup>2</sup>	R <sub>p0.2</sub> MPa	A <sub>100mm</sub> %	A <sub>11.3</sub> %	A %	Hardness HV
			Min.	Approximately	Min.	Min.	Min.	Approximately
R250	2-50	2-40	Min.250	200	3	5	7	90
** Information values only								
<b>Physical properties</b>								
Density (20 °C) g cm <sup>-3</sup>	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity (20 °C) W m <sup>-1</sup> K <sup>-1</sup>	Thermal expansion (20-300 °C) μm m <sup>-1</sup> K <sup>-1</sup>	Annealing temperature °C	E - modulus (20 °C) N mm <sup>-2</sup>		
8.9	1050	82-86	360	17		-		
<b>Properties and information</b>								
<b>Fabrication Properties</b>				<b>Joining Methods</b>				
Hot Formability		Good		Soldering		Excellent		
Cold Formability		Good		Brazing		Good		
				Oxy-acetylene welding		Not Recommended		
				Gas-shielded arc welding		Fair		