

## **DATA SHEET**

Fabricated Metal Products

Alloy Designation			
EN	Cu-DHP / CW024A		
DIN	SF-Cu / 2.0090 DIN EN1652		
UNS	C12200 ASTM B152		
JIS	C1220		

Chemical Composition				
Cu	min. 99.9	%		
0	0.015 - 0.04	%		

## **Characteristics**

**Cu-DHP** is a phosphorus-deoxidized copper (about 99.9% Cu, 0.02% P) engineered for severe forming and deep-drawing operations. It offers superior ductility versus Cu-ETP and excellent hot/cold formability, The phosphorus deoxidation eliminates hydrogenembrittlement risk during brazing, welding or annealing, and gives reliably good soldering/welding performance. Electrical and thermal conductivity are slightly lower than Cu-ETP.

Main Applications
Pipe caps   brazed heat exchangers   heating elements
Wire connectors   Oil Coolers in Airplanes   Plating Anodes
Strips for welded tube   cladding of steel and stainless steel
Deep drawn copper items   Casting Molds   Marine Oil Coolers

Physical Properties (Reference values at room temperature)					
Density	g/cm <sup>3</sup>	8.94			
Electrical conductivility	IACS%(20°C)*	80			
Modulus of elasticity	KN/mm <sup>2</sup>	115			
Coefficient of thermal expansion	10 <sup>-6</sup> /K	17.7			
Thermal conductivity	W/(m*K)	335			

## \*value for the lowest temper class

Mechanical Properties								
TEM	1PER	Tensile Strength Mpa	Yield Strength Mpa	Elongation %	Hardness Hv	Bending '	Γest(90°) BW	
R220	Н00	220 - 275	max. 140	min. 33	40 - 70	0	0	
R240	H01	235 - 300	min. 180	min. 8	65 - 95	0	0	
R290	H04	290 - 360	min. 250	min. 4	90 - 110	0	0	
R360	H10	min. 360	min. 320	min. 2	min. 110	0	0.5	

<sup>\*</sup>This leaflet is for general information only and is not subject to revision. No claims can be derived from it unless there is evidence of intent or gross negligence. The data given are no warranty that the product is of a specified quality and they cannot replace expert advice or the customer's own test.

**Contact Us:** 

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