Data sheet

EN Cu-DHP/CW024A – Rolled products 99,90 % pure copper

Alumeco A/S

Internal alloy name:	**CW024A**
International alloy name:	**EN Cu-DHP**
DIN-Werkstoff no.:	**2.0090**
Alloy type:	**Electrical conducting**
Revision date:	**11-01-2021**

Main usage

- Electrical
- Architecture
- Building
- Consumer
- Industrial

Main properties

- It has excellent welding and soldering properties
- It can be deformed excellent, either hot or cold

Important norms and literature

Rolled products
EN1652: Copper and copper alloys - Plate, sheet, strip and circles for general purposes.
EN1172:2011 COPPER AND COPPER ALLOYS - SHEET AND STRIP FOR BUILDING PURPOSES

Chemical composition (%) DIN EN1652 & EN1172:2011

Cu	P	Other elements Each	Other elements together
99.90	0,015 – 0,040	-	-

Typical mechanical properties DIN EN1652 (General Purposes)

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)	0,2 - 5	220-260	Max. 140	33	42	-	-
R240(1/2 hard)	0,2 – 15	240-300	Min. 180	8	15	-	-

Typical mechanical properties DIN EN1172:2011 (Building Purposes)

Material condition	Rm MPa	$Rp_{0,2}$ MPa	A_{50mm} %	Hardness HBW	Hardness HV
R220 (soft)	220-260	Max. 140	33	-	-
R240(1/2 hard)	240-300	Min. 140	8	-	-

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	1030	85	340	17		-

Properties and information

Fabrication Properties

Hot Formability	**Good**
Cold Formability	**Excellent**

Joining Methods

Soldering	**Excellent**
Brazing	**Excellent**
Oxy-acetylene welding	**Good**
Gas-shielded arc welding	**Excellent**