Data sheet

CuZn30/CW505L

Alumeco A/S

Internal alloy name:	**CW505L**
International alloy name:	**CuZn30**
DIN-Werkstoff no.:	**-**
Alloy type:	**-**
Revision date:	**30-03-2021**

Main usage

- Architecture
- Automotive
- Builders hardware fittings
- Electrical industry

Main properties

- Good cold/hot formability
- Good mechanical strength
- Good for brazing and soldering
- Good anti-microbial properties

Important norms and literature

EN12164: Copper and copper alloys. Rod for free machining purposes	EN1652: Copper and copper alloys. Plates, sheets & strips for general purposes
EN12167: Copper and copper alloys. Profiles and bars for general purposes	This alloy is in accordance with RoHS 2002/96/CE for electrical & electronic equipment and 2002/53/CE for auto industry.

Chemical composition (%) DIN EN 12164

Cu	Al	Fe	Ni	Pb	Sn	Zn	Other elements
69,0-71,0	-	Max. 0,05	Max. 0,3	-	Max. 0,1	Rem.	-

Typical mechanical properties DIN EN 1652

Temper	Tensile Strength R_m N/mm²	0,2% proof strength $Rp_{0,2}$ N/mm² Min.	Elongation A % Min.	Brinell Hardness HV Min.
R270	270-350	160	40	≤120
R350	350-430	170	21	95-155
R410	410-490	260	9	125-155
R480	480-570	430	4	150-190
R550	550-640	480	2	170-210
R630	>630	560	-	>190

** 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}
8.5	-	28	126	19,7	450-680	115,000

Properties and information

Fabrication Properties

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

Joining Methods

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