

**Wieland-K65** is a high copper alloy with high mechanical strength.

Material designation	
EN	CuFe2P
	CW1076
UNS*	C19400

\* Unified Numbering System (USA)

Typical applications
Tubes for air conditioning and refrigeration, heating and solar engineering, brake line tubing

Physical properties*		
Thermal conductivity	W/(m·K)	>260
Density	g/cm <sup>3</sup>	8.91

\* Reference values at room temperature

Temper (DIN EN12449)	
R300**	soft annealed
R420**	hard

According to DIN EN 12449			
Chemical composition		Mechanical properties (annealed)	
Fe	2.10–2.60 %	R <sub>m</sub> min.	>300 N/mm <sup>2</sup>
Zn	0.05–0.20 %	R <sub>p0.2</sub> max.	250 N/mm <sup>2</sup>
P	0.015–0.15 %	A min.	>25 %
Pb	max. 0.03 %	** Conformity to PED 97/23/EC can be certified through product inspection by a technical inspection agency such as TÜV.	
Cu	balance		

For the calculation of the required wall thickness see draft VdTÜV-Blatt

Fabrication properties	
Cold working	excellent
Electroplating	excellent
Hot-dip tinning	excellent
Machinability	poor

Joining	
Brazing	excellent
Soft soldering	excellent
Inert gas shielded arc welding	excellent
Resistance welding	good
Laser welding	good

Corrosion resistance
Wieland-K65 is insensitive to stress corrosion cracking. Wieland-K65 exhibits good resistance in natural atmosphere (also marine atmosphere) and industrial atmosphere. It has a better resistance to erosion and pitting corrosion than Cu-DHP in different types of water and neutral saline solutions.

Sizes available					
Type of delivery		Outside diameter mm*	Manufacture	Temper	Identification
Straight lengths (max. 7800 mm)	plain	7–108	seamless	hard or annealed	The tubes are marked (see Wieland company standards)
	inner-grooved	7–16	seamless	hard or annealed	
Level-wound coils (LWC) (coil weight on request)	plain	7–20	seamless	hard or annealed	
	inner-grooved	7–16	seamless	hard or annealed	

\* Wall thicknesses and other sizes on request

Relevant standards and specifications
<b>VdTÜV-Werkstoffblatt 567</b> Seamless drawn tubes in CuFe2P (CW107C) Wieland K65
<b>DIN EN 12449</b> Seamless, round tubes for general purposes
<b>Wieland R-1084</b> Seamless drawn plain or inner-grooved copper tubes in K65 in LWC for pressure vessels and piping
<b>Wieland R-1085</b> Seamless drawn plain or inner-grooved copper tubes in K65 in straight lengths for pressure vessels and piping