

Material designation	
EN	no EN standard
UNS	C67340

Chemical composition*	
Cu	62 %
Mn	1.5 %
Si	0.5 %
Al	0.5 %
Ni	0.5 %
Fe	0.5 %
Zn	Rest

* Reference values in % by weight

Physical properties*		
Electrical conductivity	MS/m %IACS	11 19
Thermal conductivity	W/(m·K)	75
Thermal expansion coefficient (0–300 °C)	10 ⁻⁶ /K	19.6
Density	g/cm ³	8.15
Modulus of elasticity	GPa	117

* Reference values at room temperature

Corrosion resistance

Special brass generally has excellent corrosion resistance due to alloying additions. **Wieland-S34** is characterised by good resistance to organic substances and neutral or alkaline compounds.

Product standards

no EN standard

Material properties and typical applications

Wieland-S34 is a special brass which exhibits a good machinability due to embedded silicides. Furthermore, this alloy has excellent cold-working properties. Therefore it is ideal for components which – apart from being machined – are to be coined, riveted, crimped or flanged. Due to the silicides **Wieland-S34** exhibits a better resistance to stress relaxation compared with standard brass.

This material is lead free as required by the RoHS and ELV (Pb max. 0.1 %).

Types of delivery

The Extruded and Drawn Products Division supplies bars, wire, sections and tubes. Please get in touch with your contact person regarding the available delivery forms, dimensions and tempers.

Fabrication properties

Forming		Surface treatment	
Machinability (CuZn39Pb3 = 100 %)	70 %	Polishing mechanical	good
Capacity for being cold worked	good	electrolytic	poor
Capacity for being hot worked	excellent	Electroplating	good
Joining		Heat treatment	
Resistance welding (butt weld)	fair	Melting range	840–885 °C
Inert gas shielded arc welding	fair	Hot working	600–750 °C
Gas welding	fair	Soft annealing	570–680 °C 1–3 h
Hard soldering	fair	Thermal stress relieving	300–420 °C 1–3 h
Soft soldering	fair		