

Rolled Products

AERIS 1310 (CuSn6)

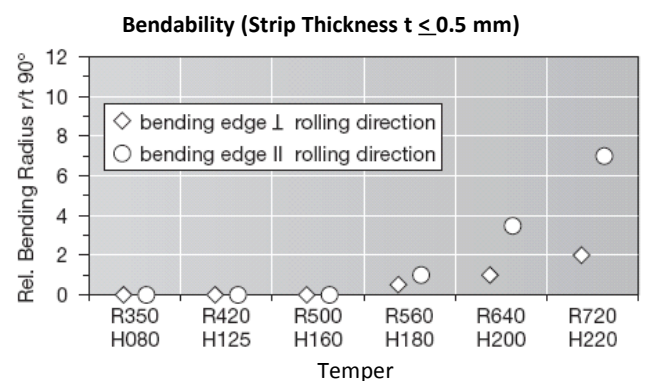
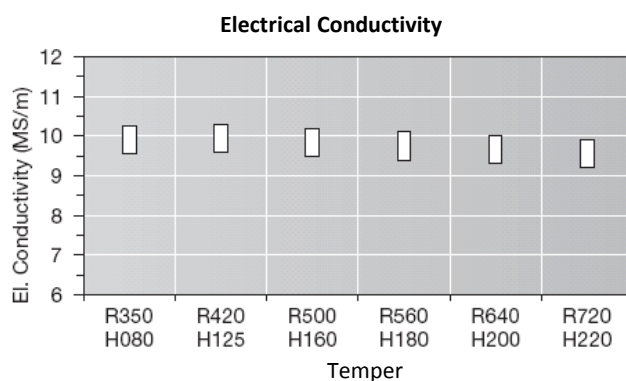


Material Designation		Chemical Composition (Reference)		Typical Application
EN	CuSn6	Sn	6%	- Textile and clothing accessoires - Special frames
UNS*	C51900	Cu	balance	- Keys

*no analogue

Physical Properties*			Fabrication Properties		Corrosion Resistance
Electrical Conductivity	MCM/M % IACS	9.0 15.5	Capacity for Being Cold Worked	excellent	Resistant to seawater and industrial atmosphere. Largely insensitive to stress corrosion cracking.
Thermal Conductivity	W/(M·K)	75	Machinability	Less suitable	
Coefficient of Electrical Resistance**	10 ⁻³ /K	0.7	Capacity for Being Electroplated	excellent	
Coefficient of Thermal Expansion**	10 ⁻⁶ /K	18.5	Capacity for Being Hot-Dip Tinned	excellent	
Density	g/cm ³	8.80	Soft Soldering	excellent	
Modulus of Elasticity	GPa	118	Resistance Welding	good	
Specific Heat	J/(g·K)	0.377	Gas Shielded Arc Welding	good	
* Reference values at room temperature ** Between 0 and 300°C			Laser Welding	good	

Mechanical Properties							
Temper		R350	R420	R500	R560	R640	R720
Tensile Strength, Rm	MPa	350-420	420-520	500-590	560-650	640-730	≥720
Yield Strength, Rp _{0.2}	MPa	≤ 300	≥ 360	≥ 460	≥ 530	≥ 610	≥ 690
Elongation, A _{50mm}	%	≥ 45	≥ 17	≥ 8	≥ 5	≥ 3	-
Temper		H090	H125	H160	H180	H200	H220
Hardness HV		80-110	125-165	160-190	180-210	200-230	≥ 220



Types and Formats Available

- Standard coils with outside diameters up to 1400 mm
- Traverse-wound coils with drum weights up to 1,5 t
- Multicoil up to 5 t
- Hot-dip tinned strip
- Contour-milled strip
- Sheet
- Strip and sheet with protective coating

Dimensions Available

- Strip thickness from 0.10 mm; Thinner gauges on request
- Strip width from 3 mm, however min. 10 x strip thickness