Schlenk Metal Foils GmbH & Co. KG • Barnsdorfer Hauptstr. 5 • 91154 Roth-Barnsdorf Germany
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CuSn8

Designation	EN / CuSn8	EN / CW453K	UNS / C52100

This bronze alloy with 8 % tin is characterized by its adequate electrical conductivity, its high mechanical strength and its good spring properties. CuSn8 is resilient towards corrosion and is well suited for soldering.

COMPOSITION OF MATERIAL

- Sn: 7,5 – 8,5 %
- Cu: balance

PHYSICAL PROPERTIES

· Density	8,79 g/cm³
· Melting point	860 - 1040 °C
· Electrical conductivity	7,5 m/Ω mm² (at 20 °C R370)
· Electrical resistivity	0,133 Ω mm²/m (at 20 °C R370)
· Temperature coefficient of electrical resistance	$0{,}065 \cdot 10^{-3}$/K (at 0 to 200 °C R370)
· Thermal conductivity	67 W/K m (at 20 °C)
· Thermal capacity	0,377 J/g K (at 20 °C)
· Coefficient of thermal expansion (linear)	$18{,}2 \cdot 10^{-6}$/K (at 20 to 300 °C)
· Modulus of elasticity (tensile)	109 GPa (at 20 °C R370)

MANUFACTURING PROGRAM	THICKNESS	WIDTH
Rolls, spools, sheets	0,01 - 0,2 mm	1 - 640 mm

not all combinations of thickness and width are available
or different dimensions please contact our technical service

TEMPER ACCORDING TO DIN EN 1652			TYPICAL VALUES (information only)
	Tensile strength Rm in MPa	Yield strength $Rp_{0,2}$ in MPa	Elongation in % L_0 = 100 mm
R370	≤ 450	≤ 300	> 10
R450	450 - 550	≥ 370	< 30
R540	540 - 630	≥ 470	< 25
R600	600 - 690	≥ 540	< 16
R660	≥ 660	≥ 620	< 13

The values in the table are valid only for foils with thickness > 0,1 mm.

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