### TECHNICAL DATASHEET



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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/cm <sup>3</sup>
Melting point	860 - 1040 °C
Electrical conductivity	7,5 m/Ω mm² (at 20 °C R370)
Electrical resistivity	$0,133\Omega$ mm <sup>2</sup> /m (at 20 °C R370)
Temperature coefficient of electrical resistance	0,065·10·3/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)	18,2·10 <sup>-6</sup> /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 this knows and width are available				

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 Rpo,2 in MPa	Elongation in % Lo = 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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