

## CONSIL<sup>®</sup> 901

### ***NOMINAL COMPOSITION***

Silver	90.0% ± 1.0%
Copper	10.0% ± 0.4%
Impurities	0.03% Max Lead
	0.05% Max Iron
	0.05% Max Cadmium
	0.06% Max Zinc
	0.01% Max Nickel
	0.02% Max Phosphorous
	0.005% Max Aluminum
Other Elements (Total)	0.10% Max

### ***PHYSICAL PROPERTIES***

Melting Point (Solidus)	1435°F (779.4°C)
Flow Point (Liquidus)	1615°F (879.4°C)
Density (Troy oz/in <sup>3</sup> )	5.43
Electrical Conductivity (%IACS) <sup>(1)</sup>	83.0 Min for soft temper (conductivity will vary with temper)

<sup>(1)</sup> IACS = International Annealed Copper Standard

**Table 1. Mechanical properties at different tempers in wire and strip form**

Form	Temper	Approx. Reduction (% in area)	Tensile Strength (1000 psi)	Minimum Elongation (% in 2")
Wire	Soft	0	34-45	25
(Rod properties generally differ. Inquire for specifics)	1/8 Hard	11	42-52	8
	1/4 Hard	21	48-58	4
	1/2 Hard	37	56-66	4
	3/4 Hard	50	61-71	3
	Hard	60	64-74	2
	Spring	84	72-82	1
	Extra Spring	90	73-83	1
Strip	Soft	0	36-46	20
(For thickness less than .500")	1/4 Hard	11	42-52	7
	1/2 Hard	21	47-57	4
	Hard	37	57-67	1
	Extra Hard	50	62-72	1
	Spring	60	66-76	1
	Extra Spring	69	68-78	0.5

### ***PRODUCT USES***

Consil 901 is the Lucas-Milhaupt, Inc. designation for an alloy of 90% silver and 10% copper. Consil 901 is the most commonly used of the silver-copper contact alloys. It has higher hardness and better resistance to wear comparing to fine silver. Consil 901 is widely used for light and medium duty devices, slip ring assemblies and rotor stock for rotary switches.

## ***AVAILABLE FORMS***

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Wire, strip, engineered preforms, specialty preforms per customer specification.

## ***SPECIFICATIONS***

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Consil 901 alloy conforms to the following specification:

- American Society for Testing and Materials (ASTM) B617

## ***APPLICABLE PRODUCT CODE(S)***

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The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 15-901.

## ***SAFETY INFORMATION***

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For more complete information refer to the Material Safety Data Sheet for Consil 901.

## ***WARRANTY CLAUSE***

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