

CONSIL® 900

NOMINAL COMPOSITION

Silver	90.0% ± 0.75%
Cadmium Oxide	10.0% ± 0.75%
Impurities	0.03% Max Lead
	0.05% Max Iron
	0.10% Max Copper
	0.06% Max Zinc
	0.06% Max Tin
	0.005% Max Aluminum
Total Specified Impurities	0.06% Max
Total All Impurities	0.15% Max

PHYSICAL PROPERTIES

Density (Troy oz/in ³)	5.37
Electrical Conductivity (%IACS) ⁽¹⁾	80.0 Min for soft temper (conductivity will vary with temper)

Table 1. Mechanical properties at different tempers in wire form

<u>Form</u>	<u>Temper</u>	Approximate Reduction (% in area)	Tensile Strength (lbs/in ²)	Minimum Elongation (% in 2 in.)
Wire	Soft	0	33,000 - 43,000	25.0
	1/8 Hard	11.0	41,000 - 51,000	3.00
	1/4 Hard	21.0	45,000 - 55,000	3.00
	1/2 Hard	37.0	48,000 - 58,000	1.00
	3/4 Hard	50.0	53,000 - 63,000	1.00
	Hard	60.0	55,000 - 65,000	1.00
	C Temper ⁽²⁾	--	--	--
	Over 0.060 in. dia.	--	35,000 - 48,000	7.00
	0.035 in. - 0.060 in. dia.	--	40,000 - 53,000	3.00

⁽¹⁾ IACS = International Annealed Copper Standard

⁽²⁾ Commonly referred as "contact temper".

PRODUCT USES

Consil 900 is the Lucas-Milhaupt, Inc. designation for an internally oxidized alloy of 90% silver and 10% cadmium oxide. It has extremely small, uniformly dispersed cadmium oxide particles, a characteristic desirable for long contact life. Consil 900 is used for contacts in heavy-duty devices, starting motors, contactors, and other applications where high surge, high current capacity and resistance to welding and arc erosion are desired. This material is produced by a special Handy & Harman/Lucas-Milhaupt, Inc. process, which provides excellent headability and no cadmium oxide depletion of the core or surface.

SPECIFICATIONS

Consil 900 alloy conforms to the following specifications: N/A

AVAILABLE FORMS

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

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 15-900.

SAFETY INFORMATION

For more complete information refer to the Material Safety Data Sheet for Consil 900.

WARRANTY CLAUSE

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