



Silver Cadmium Oxide

Datasheet - Internally Oxidized Grain Silver-Cadmium Oxide

SCOPE: This information refers to silver cadmium oxide manufactured by casting silver and cadmium together and producing grain, which is then oxidized. The material can then be processed through extruding and rolling or redrawing to get strip or wire formats. Strip materials have the option of a solid silver backing material to allow for bonding or brazing during downstream processing.

90/10 AgCdO

Product forms offered: Wire, Strip, Tape & Buttons

Chemical composition

Ag	90.00	+/-1.00%
Cadmium Oxide	10.00	+/-1.00%

Impurities (% max)

Zinc	0.06 % max
Fe	0.05 % max
Cu	0.1 % max
Al	0.005 % max
Pb	0.03 % max
others	0.06 % max

Note: all values stated are nominal and meet ASTM B 781 Standards

Temper	Approx. Red.	Tensile Strength	Yield Strength	Elongation
Soft	0	38	33	25
C-Temper*	4	42	38	5
1/8 Hard	11	46	41	3
1/4 Hard	21	50	50	3
1/2 Hard	37	53	58	1
3/4 Hard	50	58	59	1
Full	60	60	60	1

* Commonly referred to as "Contact Temper". This temper is specified by many users for cold heading.

Density

5.4 oz/in³

Electrical Conductivity

80% min IACS for Soft temper.
(Conductivity will vary with temper)



90/10 AgCdO at 200X

86.5/13.5 AgCdO

Product forms offered: Wire, Strip, Tape & Buttons

Density
Electrical Conductivity

5.2 oz/in3
75% min IACS for Soft temper.
(Conductivity will vary with temper)

Chemical composition

Ag	86.75	+/-1.00%
Cadmium Oxide	10.00	+/-1.00%

Impurites (% max)	
Zinc	0.06 % max
Fe	0.05 % max
Cu	0.1 % max
Al	0.005 % max
Pb	0.03 % max
others	0.06 % max

Note: all values stated are nominal and meet
ASTM B 781 Standards

	Approx. Red.	Tensile Strength	Yield Strength	Elongation
Temper				
Soft	0	33	33	31
C-Temper*	4	38	38	24
1/8 Hard	11	41	41	19
1/4 Hard	21	50	50	8
1/2 Hard	37	58	58	6
3/4 Hard	50	59	59	3
Full	60	60	60	2

* Commonly referred to as "Contact Temper". This temper is specified by many users for cold heading.

85/15 AgCdO

Product forms offered: Wire, Strip, Tape & Buttons

Density
Electrical Conductivity

5.1 oz/in3
80% min IACS for Soft temper.
(Conductivity will vary with temper)

Chemical composition

Ag	85.00	+/-1.00%
Cadmium Oxide	15.00	+/-1.00%

Impurites (% max)	
Zinc	0.06 % max
Fe	0.05 % max
Cu	0.1 % max
Al	0.005 % max
Pb	0.03 % max
others	0.06 % max

Note: all values stated are nominal and meet
ASTM B 781 Standards

	Approx. Red.	Tensile Strength	Yield Strength	Elongation
Temper	% in area	KSI	KSI	% in 2"
Soft	0	42	27	30
C-Temper*	4	45	39	24
1/8 Hard	11	50	45	11
1/4 Hard	21	55	48	7
1/2 Hard	37	59	52	5
3/4 Hard	50	62	53	3
Full	60	64	56	2

* Commonly referred to as "Contact Temper". This temper is specified by many users for cold heading.