

# PRODUCT Data Sheet

## CircuitWriter™ Conductive Ink

### 1. Part No.:

CW100L, Liquid

### 2. Container Size:

CW100P, Pen, 4 grams  
CW100L-4, Bottle, 125 grams  
CW100L-32, Container, 1000 grams

### 3. Product Description:

Precision Conductive Ink. Apply instant traces on most surfaces (epoxy, glass, plastic, metal). Draw traces on circuit boards, repair defective traces, make jumpers and shield electronics, design prototype circuits and repair rear-window heater traces.

### 4. Features/Benefits:

Makes instant traces on most surfaces (epoxy, glass, plastic & metal).  
Excellent adhesion, Good abrasion resistance & low electrical resistance.  
Dries in minutes at room temperature to a highly conductive flexible coating.  
Apply to both rigid and flexible materials with excellent adhesion.

### 5. Specifications:

**Color:** Silver  
**Binder:** Acrylic  
**Solids content by weight:** 55-60%  
**Density:** 14.1 lbs/gal  
**Electrical Resistance:** < 0.020 ohm/sq/mil  
**Shielding Performance:** 76 dB  
**Viscosity:** 20-25 sec., #2 Zahn Cup @ 25 °C  
**Ideal Film Thickness:** Between 0.4 and 1.0 mils  
**Theoretical Coverage:** 340 Sq ft/gal @ 1 mil  
**VOC Content:** 42%-46% @ 130°C

**Soldering:** After heat curing only. Use low temperature soldering (less than 350°F) for not more than 5 seconds. Use low temperature soldering iron.

**Shelf Life:** If stored in dry cool space, 6 months after first use, 12 months if unopened.





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#### IF SPRAYING:

**Diluent:** acetone, recommended starting with 1:1 ratio by volume

**Drying time:** 10 min air, then 10 minutes at 180° (6" from 50 watt light bulb), or air cure for 24 hrs.

Recommended thickness: 0.5-1.5 mils dried

#### TYPICAL PROPERTIES WHEN DRIED:

**Sheet resistance:** 0.020 ohms/sq/mil (25 um)

**Attenuation:** 76 dB

#### 6. Formulation:

60-70%	Silver (Metallic) (CAS 7440-22-4)
15-40%	Dimethyl Glutarate (CAS 1119-40-0)
NA	Dimethyl Succinate (CAS 106-65-0)
NA	Dimethyl Adipate (CAS 627-93-0)
NA	Proprietary Resins



#### 7. Directions for Use:

1. Turn off, unplug the device.
2. PREPARE SURFACE. Remove loose scale, oil, grease and dirt from surface.
3. SHAKE WELL. Shake for at least 10 seconds. Shaker ball inside will assist mixing of materials. If necessary, clean tip with tissue or other soft cloth to remove dried material.
4. APPLY. Squeeze the pen barrel while pressing the pen tip lightly on surface. Practice on scrap piece before attempting prototype or repairs. If tip gets clogged, remove pen tip (turn clockwise) and clean.

**CAUTION: DO NOT APPLY TO HOT SURFACE - TIP WILL MELT. MELTED TIP VOIDS WARRANTY.**

5. DRY. Allow approximately 24 hours to dry at room temperature (70°F). Recommend curing 6" away from a 40 watt light bulb for 4 hours. Then let sit overnight.
6. CLEAN UP. Acetone or other suitable solvent.

#### 8. Shipping and Additional Information:

Hazardous: ORMD

#### 9. Other Information:

RoHS Compliant:	YES
VOC Compliant:	YES
<b>MSDS Link, D5S-6</b>	<a href="http://store.caig.com/s.nl/sc.18/category.3532/f">http://store.caig.com/s.nl/sc.18/category.3532/f</a>
Product Sheet:	<a href="http://store.caig.com/s.nl/sc.2/category.174/f">http://store.caig.com/s.nl/sc.2/category.174/f</a>



#### CAIG Laboratories, Inc.

12200 Thatcher Court, Poway, CA 92064 U.S.A.

**P:** 858/486-8388 | **E:** info@caig.com

**WEB:** www.caig.com | www.deoxit.com





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### 11. Contact Information:



**Website:** [www.caig.com](http://www.caig.com)  
[www.deoxit.com](http://www.deoxit.com)

**General email:** [info@caig.com](mailto:info@caig.com)

**Technical email:** [tech@caig.com](mailto:tech@caig.com)

#### North America (Headquarters):

**CAIG Laboratories, Inc.**  
12200 Thatcher Court  
Poway, CA 92064 USA  
Tel: (858) 486-8388  
Fax: (858) 486-8398

#### Distributors (Domestic & International):

<http://store.caig.com/s.nl/sc.15/f>



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