

# Product Data Sheet OPACI-COAT-500® DECORATIVE Screen Print Ink

---

## PRODUCT NAME

---

OPACI-COAT 500® liquid silicone rubber screen print ink.

## MANUFACTURER

---

Industrial Control Development, Inc.  
13911 NW Third Court, Suite 100  
Vancouver, WA USA 98685-5701  
Phone: (360) 546-2286  
Fax: (360) 546-2287

## DESCRIPTION

---

"OPACI-COAT 500®" DECO is the trade name for a liquid silicone rubber that cures with the application of heat. The liquid silicone rubber adheres to most glass surfaces and may be applied by screen print application equipment. The liquid silicone rubber requires a minimum glass/coating temperature of 302-330°F (150-161°C); 2 minute IR oven.

## USE

---

OPACI-COAT-500® DECO Screen Print ink is for screen print applications only. OPACI-COAT-500® DECO Screen Print ink requires the use of a catalyst. The catalyst is included with each shipment. The catalyst solution must be stirred thoroughly prior to addition to liquid. The use level for the catalyst solution is 1% by weight of screen liquid. Calculate 1% of this weight (1/100 by weight).  
Example:  
10 pounds (lbs) of liquid will require .1 pounds (lbs) of catalyst solution  
- or -

B. 100 grams of liquid will require 1 gram of catalyst solution.

Once the catalyst is introduced to liquid, the liquid must be thoroughly mixed. Periodically scrape sides of container to ensure thorough catalyst incorporation. After mixing the catalyst into the liquid, there should be a 10-15 minute wait time before application of liquid.

OPACI-COAT 500® DECO Screen Print Liquid was developed for Decorative and Appliance Markets which require excellent color retention properties at higher temperatures and excellent UV resistance.

OPACI-COAT-500® DECO may be laminated with EVA.

**Adhesion:** OPACI-COAT 500® DECO Screen Print has outstanding adhesion to sputter coated, float and pyrolytic architectural glass substrates. The liquid silicone rubber technology is supplied by Dow Corning Corporation® to ICD where final proprietary blending is performed and quality control standards are met. ICD has performed rigorous testing involving various substrates. The results have been excellent.

**Approved Factory Fabricators:** Quality application is assured by the preferential training and on-going inspection of "Approved Factory Fabricators".

**Quality Control:** Sample and batch quality control are achieved through the use of computer technology.

**Color Availability:** Limited colors are currently available.

**Color Fast:** All of the pigments used in OPACI-COAT-500® DECO are rated excellent in color fastness.

---

---

## TYPICAL PROPERTIES

---

### **Uncured**

Color: ..... Various  
Solids: ..... > 98%  
Specific Gravity: ..... 1.04 – 1.20

### **Maximum Physical Properties**

Reached In: ..... 7 Days  
Pot Life: ..... 24 Hours

**Application Method:** OPACI-COAT-500® can be screen printed.

**Curing:** OPACI-COAT-500® DECO must be cured with the application of heat. The liquid silicone rubber requires a minimum glass temperature of 302-330°F (150-161°C); during 2 minute IR oven time. Use of infrared ovens are required for decrease of cure time.

**Clean-up:** Clean up of OPACI-COAT 500® is accomplished with either MEK or D-limonene.

**Shipping:** Shipping of OPACI-COAT 500® may be immediate after cure

**Coating Thickness:** Should be applied at a thickness of 1 mil (.0254mm). Coatings of less thickness will not reach optimum film properties.

**Storage:** OPACI-COAT 500® is a liquid silicone rubber material. Storage temperature must be <70°F/21°C.

**Shelf Life:** The liquid shelf life is 6 months from date of shipment when stored at 70°F/21°C.

**Edge deletion** is required for fabrication of insulated glass units.

---

## LIMITATIONS

---

Neoprene gaskets and/or setting blocks must **not** be used directly against the silicone coated surface. Bond breaker tape should be used.

Compatibility of other products, should be confirmed with ICD. Under no circumstance should bonding materials with acidic hydrocarbon based thinners be used.

Some applications may require different thickness for maximum protection. The substrate must be clean and dry. Free of ammonia and sulfur compounds.

---

## PRECAUTIONS

---

The liquid silicone rubber can cause eye irritation. Skin and eye contact should be avoided. In case of eye contact, flush eyes with water for at least 15 minutes and obtain medical attention. For skin contact, no first aid needed.

---

## TECHNICAL DATA

---

**Flexibility:** Sub-zero temperatures to over 300°F (149°C).

**Maintains Adhesion:** From -50°F (-46°C) to 300°F (149°C).

Excellent Ozone & Ultra Violet radiation resistance.

**Water-proof.** Liquid will not pass through the coating.

**Weather Testing:** QUV Weatherometer testing confirms weatherability.

**Environmental Impact:** OPACI-COAT-500® is non-hazardous when mixed and cured.

---

## AVAILABILITY AND COST

---

**Availability:** OPACI-COAT 500® DECO is available for shipment anywhere in the world from our plant in Vancouver, Washington USA to ICD Approved Factory Fabricators.

**Cost:** Contact ICD

---

## TECHNICAL SERVICES

---

ICD has experienced staff available for technical consultation and fabricators in most major cities.

NOTES

U.S. Patent No. 7,309,734