

# Product Data

# OPACI-COAT-300®



### PRODUCT NAME

OPACI-COAT-300® water-based silicone glass coating.

### MANUFACTURER

Industrial Control Development, Inc.  
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### DESCRIPTION

"OPACI-COAT-300®" is the trade name for a patented one component, water-base silicone coating that is supplied as a flowable, thixotropic emulsion. Upon evaporation of water, the applied coating will cure to a tack-free silicone elastomeric film providing opacification in any color to glass and related construction materials.

### USE

Architects and designers select any color for opacifying glass for exterior spandrels or interior wall cladding. It may be used on annealed, heat strengthened or tempered glass with equal efficacy. It is a problem free method for opacifying reflective, high performance or tint glass.

**Adhesion:** OPACI-COAT-300® has outstanding adhesion to architectural glass substrates. The water-base silicone 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.

**Glass Retention:** The elastomeric nature of OPACI-COAT-300® creates a rubber like film which meets all ASTM criteria for fallout protection without the need of additional taping or film application.

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

**Field Repairable:** Any damage to the coating can easily be repaired at the job site.

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

**Color Availability:** There is a wide range of formulated special colors. Virtually any color can be achieved and exact color matching is possible with the use of a computerized spectrophotometer.

**Color Fast:** All of the pigments used in OPACI-COAT-300® are rated excellent in color fastness.

### TYPICAL PROPERTIES

Maximum physical properties (full cure) of OPACI-COAT-300® are achieved at seven days, 70°F (21°C) and 50% relative humidity. The product will attain enough improved properties for shipment with adequate evaporation of water.

#### Uncured

**Color:** ..... Various  
**Percent Solids:** ..... 45-47%  
**Specific Gravity:** ..... .97 - 1.05  
**pH (CTM 0007):** ..... 11.2

#### Maximum Physical

**Properties:** 7 days; 70°F (21°C)  
**Color:** ..... Various  
**Durometer, Shore A (CTM0099):** ..... 40  
**Tensile, Psi (CTM01374):** . 400  
**Elongation % (CTM0137A):** ..... 400%

#### Standard Colors:

- #0-0020 Snow White
- #0-0186 Light White
- #1-0016 Charcoal
- #1-818 Black
- #2-0225 Evergreen
- #2-743 Harmony Solex
- #3-0586 Medium Gray
- #3-0770 Warm Gray
- #3-747 Harmony Graylite #14
- #3-820 Harmony Gray
- #3-967 Black-Gray
- #4-0925 Neutral
- #4-822 Harmony Bronze
- #4-975 Lava Bronze
- #6-0025 Harmony Blue

**Application Methods:** OPACI-COAT-300® can be sprayed, curtain coated or roll coated.

**Evaporation Methods:** OPACI-COAT-300® dries upon evaporation of water. Drying will take place at room temperature (70°F/21°C) and 50% relative humidity in approximately 2-4 hours. Acceleration of this drying rate can easily be accomplished by passing the coated glass through a drying oven. Drying rates vary depending upon heat and humidity.

**Ease of Clean-up:** Flushing with soap and water or a mild cleaning agent is usually all that is necessary to clean equipment of

uncured emulsion.

**Shipping:** In no case should the coated product be shipped before the drying has taken place.

**Coating Thickness** should be a minimum of 8 mills (.2mm) applied. Less thickness affects the products durability.

**Storage:** OPACI-COAT-300® is a water-based material. The product, unapplied, must not freeze! Storage temperature should be between 32°F (0°C) and 72°F (22°C).

**Shelf Life:** The liquid shelf life is 6 months from date of shipment.

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

## LIMITATIONS

OPACI-COAT-300® is approved for **weather-seal only**. Edges must be deleted for structural applications unless project is pre-approved. Contact ICD.

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

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 coating should be applied at 60°F (16°C) or above. The substrate must be clean and dry. The coating must not freeze before curing.

This product is not recommended for use in vision areas. For proper viewing methods refer to ASTM C1048,

## PRECAUTIONS

The uncured emulsion can cause eye irritation. Skin and eye contact should be avoided. In case of eye contact, flush eyes with water for a least 15 minutes and obtain medical attention. For skin contact, flush affected areas with water as soon as practical.

## TECHNICAL DATA

### Applicable Standards:

GTA #89-1-6, Section 4.1 1991

OPACI-COAT-300® offers the ability to meet or exceed fallout and safety glazing requirements.

**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.

**Waterproof.** Liquid will not pass through the coating.

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

**Environmental Impact:** OPACI-COAT-300® is non-hazardous. It is organic solvent free. Costly, hazardous and environmentally undesirable hydrocarbon solvents are eliminated.

## AVAILABILITY AND COST

**Availability:** OPACI-COAT-300® is available for shipment anywhere in the world from our plant in Vancouver, Washington USA to ICD Approved Factory Fabricators. Limited colors are stocked in Europe.

**Cost:** Contact ICD for a list of Approved Factory Fabricators in your area.

## WARRANTY

Approved Factory Fabricators of OPACI-COAT-300® are offered a ten year limited warranty. Please contact a fabricator or the manufacturer for a copy.

Even with the latest design and materials, success depends upon quality products, installation, fabrication and workmanship. Silicone opacifier fabricator and sealant contractors significantly effect the ultimate performance and appearance of the project. It is important to ICD that products and materials be used to their best advantage. ICD feels it is important to periodically review, technical and application techniques for its fabricator's continued success with the use of ICD's product. Investing time and care before and during application has far reaching effects on the quality of the finished project. It is the goal of ICD to aid in quality control measures on a continuous basis and remain available to answer any question that may arise, whether it be from the architect, the interior designer, the fabricator, the building owner, the contractor or the glazier.

The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since ICD cannot know all of the uses to which these products may be put or the conditions of use, it makes no warranties concerning the fitness or suitability of its products for a particular use of purpose.

Users should thoroughly test any proposed use of these products and independently conclude satisfactory performance in the application. Likewise, if the manner in which these products is used requires governmental approval or clearance, the user must obtain it.

ICD warrants that these products will meet its specifications. There is no warranty of merchantability or fitness for use. ICD will not be liable for consequential damages of any kind.

## MAINTENANCE

None required.

## TECHNICAL SERVICES

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