



**PS200  
HYDROPHOBIC  
GLASS COATING**



**SPECIALTIES**

## PS200 HYDROPHOBIC (WATER REPELLANT) GLASS COATING

PS200 provides surfaces for:

**Optical Fibers** - Provides lubricity and reduces breakage during fabrication and operational flexing.

**Laboratory Glassware** - Improves drainage, reduces breakage.

**Fluorescent Light Bulbs** - Increases scratch resistance and surface resistivity, reduces breakage.

**Clinical Analysis** - Treatment of analytical equipment extends clotting time of blood. Reduces hemolysis and protein adsorption.

PS200 is a solution of t-butanol and diacetone alcohol which contains a monomeric octadecylsilane derivative that reacts with water to form a silanol rich pre-polymer and an alcohol. This prepolymer condenses with available hydroxyl groups on glass (or other siliceous materials) to form a chemically bound alkylsilicone. Each liter of solution will coat approximately 250 m<sup>2</sup> of surface (600 15-cm test tubes or 80 1-L beakers).

## PROPERTIES

% Active	20%
Color	Max 11 Gardner Scale
Flashpoint	10°C
Specific Gravity	0.88 @ 25°C
Solidification Point	-30°C

## APPLICATION

1. Thoroughly clean surface with an alkaline detergent (used glass surfaces may require an immersion in 2 - 3% sodium hydroxide). All detergent must be removed prior to application.
2. Using ordinary tap water, prepare a 1% PS200 solution (hard water is not acceptable).
3. Immerse the surface in the PS200 solution for 5 - 10 seconds, ensuring that all surfaces are wetted by the solution. Agitation of the solution generally results in more uniform deposition.
4. After immersion, remove the surface from the solution and thoroughly rinse with water to remove excess PS200 from the surface.

Cure the PS200 coating by bringing the surface temperature to 100°C for 3 - 5 minutes. Room temperature cure may be accomplished by air drying for 24 hours if relative humidity is 65% or less.

## SURFACE PROPERTIES

Values reported are for glass slides dipped in 1% solutions of PS200 cured at 100°C.



### Critical Surface Tension

Untreated	$c = 78$ dynes/cm
Treated	$c = 31$ dynes/cm

### Surface Resistivity

Untreated	$1 \times 10^{12}$ ohms
Treated	$1.2 \times 10^{13}$ ohms

### Coefficient of Friction Static

Glass Slide on Glass Slide

Untreated	0.9 - 1.0
Treated	0.2 - 0.3

### Blood Protein Adsorption

Comparitive 100 Hour Adsorption Value for Human Blood on Borosilicate Glass Surfaces\*

Untreated	0.13 mg/mm <sup>2</sup>
Treated	0.01 - 0.02 mg/mm <sup>2</sup>

\*These results are not meant to suggest "in vivo" applications of PS200. PS200 should be used only in treatment of diagnostic apparatus for clinical analysis in external human body applications.

## PS200 STABILITY

- Aqueous solutions of PS200 are not stable indefinitely and may turn cloudy.
- Small precipitate may form during storage which does not affect its properties.
- If over 1/3 of the volume contains precipitate, the solution should not be used.
- The solution may turn cloudy at low temperatures, gentle warming will correct.
- Shelf life is 6 months from the date of manufacturing.
- PS200 is not for food or drug use.

## PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Bristol, PA 19007. Terms of payment are net 30 days.

## MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

## SHIPMENTS

Normal process is shipment within one business day after receipt of an order if material is in stock. Unless special shipping arrangements are made, all orders will be sent via Federal Express Ground. Shipping and handling charges (freight, insurance, hazardous materials fee) will be added to the invoice unless requested by the customer.

## SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. Please call a sales representative for more information on special pricing qualifications.

## RETURN POLICY

Our sales staff will process your return. Before returning merchandise, please call to obtain a return authorization number from a sales representative. We will need to know the reason for the return, date of purchase, purchase order number, invoice number, catalog number and lot number of product returned in order to issue a return authorization number.

## WARRANTY

All products manufactured by UCT Specialties, LLC are guaranteed against defects in materials or workmanship for a period of 90 days from shipment. UCT Specialties, LLC will replace any items that prove to be defective during that time period.

The exclusive remedy requires the end user to first advise UCT Specialties, LLC of the defective product by phone or in writing. Secondly, the defective product must be returned within 30 days after proper approval from the Product Manager. All returns must indicate the purchase order number, lot number and the shipping date. UCT Specialties, LLC total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

## Contact Us

Phone: 215.781.9255  
800.541.0559  
Fax: 215.785.1226

UCT, Inc.  
2731 Bartram Rd.  
Bristol, PA 19007

Email: [uct\\_specialties@unitedchem.com](mailto:uct_specialties@unitedchem.com)  
Web: [www.unitedchem.com](http://www.unitedchem.com)

