



Data Sheet  
NYACOL® TiSol-PC

## Colloidal Titanium Dioxide

### NYACOL® TiSol-PC

#### SUMMARY

NYACOL TiSol-PC is an aqueous dispersion of ultrafine titanium dioxide that is designed to be used as a self-cleaning coating. TiSol-PC is a light activated photocatalyst and has an extended absorption profile enabling the product to be functional with fluorescent and LED lighting, as well as sunlight.

#### TYPICAL PROPERTIES

Parameter	TiSol-PC
Appearance	Light Yellow, Transparent
Solid Content, wt. %	< 1
pH	7
Specific Gravity	1.0
Viscosity, cPs	< 4
Shelf Life	Two Years

#### APPLICATIONS

- **Self-Cleaning Surfaces:**  
TiSol-PC can be applied to all types of bathroom tiles and fixtures to provide a self-cleaning, odor removing coating. Locker rooms and bathrooms can be maintained odor free using a TiSol-PC coating.
- **Textiles:**  
TiSol-PC forms a flexible coating on fabrics and provides a self-cleaning, deodorizing surface. Commercial drapes and carpets will benefit from a TiSol-PC coating.
- **Concrete and Wood:**  
TiSol-PC can be applied to concrete and wood to provide self-cleaning surfaces. Concrete coated with TiSol-PC will remove VOC from the air, providing an excellent method for pollution control. Porous surfaces like concrete and wood will require higher application rates of 2500 ft.<sup>2</sup>/gallon.
- **Solar Panel Glass:**  
TiSol-PC provides an excellent alternative to fluorinated hydrophobic glass coatings used in solar panels. TiSol-PC is super-hydrophilic, meaning rainwater does not bead up like it does with hydrophobic coatings. The light activated photocatalyst continuously destroys all organics, such as pollen, molds, fungus and bird droppings. An added benefit is the destruction of airborne VOCs as the air passes over the panels.

TiSol-PC can be applied at the front end of the line for solar panel production, or at the glass manufacturer. It can also be applied as part of the cleaning and restoration process for existing solar panel installations.



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#### HOW IT WORKS

NYACOL TiSol-PC is light activated, meaning UV light and part of the visible light spectrum generate electron holes in the photocatalytic top layer. Hydroxide radicals and super-oxide ions are generated, which degrade surface contaminants and organics. The contaminants are broken down and easily washed away.

#### HOW TO APPLY

A high-pressure sprayer is used to apply TiSol-PC. Care must be taken not to over-apply. Typically, three passes will be required to establish a good coating.

#### HANDLING

NYACOL TiSol-PC should not be subjected to temperatures of 32°F or below to avoid freezing.

#### SAFETY

Users should observe precautions printed on the package label. A Safety Data Sheet for this product will be supplied on request.

#### FOR ADDITIONAL INFORMATION OR TO ORDER MATERIAL

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