



Technical Data Sheet

CrystalCoat® PR-504

Water Based Primer - Flow Coat

DESCRIPTION

CrystalCoat® PR-504 is a water-based primer designed to impart adhesion to polycarbonate in flow coat application.

FEATURES

- Adhesion promotion for various coatings on polycarbonate
- Low VOC content
- Impact resistance

STORAGE CONDITIONS

The recommended storage temperature for PR-504 is 20 - 23°C (60—80°F).

When stored at this temperature in the original closed container, it is recommended to start use of PR-504 within 6 months of the date received.

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	3.5 - 5.0 %
Viscosity @ 25°C	< 5.0 cP
Density @ 25°C	1.010 - 1.030 g/mL
Solvents: Water, EB Glycol Ether, NMP	

CURED FILM PROPERTIES

PROPERTY	TYPICAL VALUES
Adhesion	100 %
Primer Thickness	0.3 - 1.0 µm
Refractive Index	1.50

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 35 - 60% RH
Air Flow	Filtered, Laminar (Class 100)
Primer Temperature	20 - 23°C
Primer Filtration	1 - 5 µm absolute
Dry Time/Temperature	3-5 min with IR or 30 min @ 20-25°C



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SDC TECHNOLOGIES CONTACT INFORMATION

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EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of PR-504 in order to avoid any possible contamination problems. The cleaning process should include multiple solvent rinses (utilizing a solvent compatible with the material in prior use with the equipment) followed by a thorough methanol rinse. DI water should also be used for cleaning equipment after the use of PR-504.

Equipment Materials: All equipment surfaces that are exposed to PR-504 should be constructed of stainless steel, polypropylene or Teflon®. Other materials should be tested for compatibility with PR-504 prior to use. Materials made with polyvinyl chloride (PVC) should not be used under any circumstances with PR-504 or other primers or coatings that contain glycol ethers.

CLEANING OF SUBSTRATE

Prior to coating with PR-504, parts should be clean and free of any surface residues. If needed, parts can be spot cleaned with isopropanol and a lint-free cloth. Part should then be blown with antistatic air before application of PR-504.

SOLUTION MANAGEMENT

For optimum performance, PR-504 should be maintained in a % solids range of 3.5 - 5.0%. Higher or lower solids can cause appearance problems or lead to a coating deposition that is either too thick or too thin, respectively. The % solids should be measured on a regular basis and adjusted as needed by the addition of SM-319 (93:7 mix of DI water and EB glycol ether).

HEALTH & SAFETY INFORMATION

Before using this product, read and understand the Safety Data Sheet, SDS, which provides information on health, physical, and environmental hazards, handling precautions and first aid recommendations. For a copy of an SDS, contact a sales or customer service representative.

WARRANTY & LIABILITY LIMITATIONS

Information contained herein is accurate to the best of our knowledge. The coating solution properties and cured coating properties listed herein represent typical values for PR-504 and are not meant as specifications. SDC Technologies, Inc. insists that users conduct their own tests for applicability and fitness for any purpose. Statements concerning use of products or formulations described herein shall not be construed as a warranty or license to infringe any patent or trademark, and no liability for infringement arising out of such use is assumed. Please refer to SDC Technologies' Standard Terms and Conditions or to your Purchase Agreement with SDC for the warranty coverage of SDC's product.

PRODUCT SHIPPING & AVAILABILITY

Typical lead-time for shipment of PR-504 is four (4) weeks from confirmation of a purchase order. SDC provides several shipping options. Please contact an SDC representative to determine which option best fits your needs.