



CrystalCoat® CP-163

1.60 Refractive Index Impact Resistant Primer

DESCRIPTION

CrystalCoat® CP-163 is a 1.60 refractive index solvent-based primer designed to impart adhesion to high refractive index cast resin substrates.

FEATURES

- Impact resistance
- Refractive Index 1.6
- Adhesion promoter on high index substrates e.g MR-8™, MR-7™, MR-10™, and MR-174™
- Optical clarity

STORAGE AND USE

The recommended storage temperature for CP-163 is -18°C (0°F). When stored at this temperature in the original closed container, it is recommended to start use of CP-163 within 6 months of the date received.

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	6.5 - 8.5 %
Viscosity @ 25°C	≤9 cP
Density	0.93 - 0.99 g/ml
Solvents: Water, Methanol, DAA, NMP	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	1.0 - 2.0 µm
Refractive Index	1.60 - 1.61
Adhesion	100 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 20 - 60 % RH
Air Flow	Filtered, Laminar (Class 100)
Coating Temperature	8 - 18°C
Coating Filtration	1 - 5 µm absolute
Extraction Speed	1.5 - 2.0 mm/s
Dry Time/Temperature	5 min infrared heater or 10 min @ 80°C



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1.6 Refractive Index Primer

SDC TECHNOLOGIES CONTACT INFORMATION

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CrystalCoat® is a registered trademark of SDC Technologies, Inc.

Teflon® is a registered trademark of The Chemours Company FC, LLC.

MR-8™, MR-7™, MR-10™ & MR-174™ are trademarks of Mitsui Chemicals, Inc.

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EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of CP-163 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 DI water rinse. DI water should also be used for cleaning equipment after the use of CP-163.

Equipment Materials: All equipment surfaces that are exposed to CP-163 should be constructed of stainless steel, polypropylene or Teflon®. Other materials should be tested for compatibility with CP-163 prior to use. Materials made with polyvinyl chloride (PVC) should not be used under any circumstances with CP-163 or other primers or coatings that contain glycol ethers.

PRETREATMENT AND CLEANING OF SUBSTRATE

Prior to coating with CP-163, parts should be clean and free of any surface residues. The parts should be immersed in a 5- 10% aqueous solution of sodium / potassium hydroxide or detergent at 50 - 60°C for 5 to 10 minutes. A typical treatment would be 10% NaOH at 50°C for 5 minutes with ultrasonics. Following the NaOH/KOH treatment, parts need to be thoroughly rinsed with de-ionized water to ensure the complete removal of any caustic residue.

For information regarding application of CP-163 to other substrates, please contact SDC.

SOLUTION MANAGEMENT

For optimum performance, CP-163 coating solution should be maintained in a % solids range of 6.5 - 8.5%. 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 methanol (SM-700).

HEALTH AND 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 AND 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 CP-163 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 AND AVAILABILITY

Typical lead-time for shipment of CP-163 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.