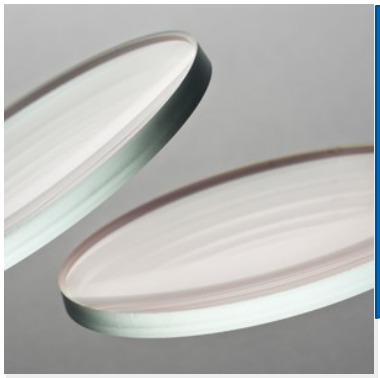

Technical Data Sheet

CrystalCoat® PR-820

1.6 Refractive Index Primer

DESCRIPTION

CrystalCoat® PR-820 is a 1.6 refractive index solvent based primer designed to impart adhesion to high refractive index cast resin substrates and polycarbonate.

FEATURES

- Impact resistance
- Refractive Index 1.6
- Adhesion promoter on high index substrates e.g MR-8™, MR-7™, MR-10™, MR-174™ and PC, CR-39®
- Fast drying
- Optical clarity

STORAGE AND USE

The recommended storage temperature for PR-820 is –18°C (0°F). When stored at this temperature in the original closed container, it is recommended to start use of PR-820 within 6 months of the date received.

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	6.0 - 8.0 %
Viscosity @ 25°C	≤10 cP
Density	0.960 - 1.020 g/ml
Solvents: Water, Methanol, DAA	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	0.5 - 1.0 µm
Refractive Index	1.6
Adhesion	100 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 35 - 60 % RH
Air Flow	Filtered, Laminar (Class 100)
Coating Temperature	10 - 18°C
Coating Filtration	1 - 5 µm absolute
Extraction Speed	0.8 - 1.5 mm/s
Dry Time/Temperature	5 min infrared heater or 10 min @ 80°C

sdc Technologies

CrystalCoat® PR-820

1.6 Refractive Index Primer

EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of PR-820 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. Methanol should also be used for cleaning equipment after the use of PR-820.

Equipment Materials: All equipment surfaces that are exposed to PR-820 should be constructed of stainless steel, polypropylene or Teflon®. Other materials should be tested for compatibility with PR-820 prior to use. Materials made with polyvinyl chloride (PVC) should not be used under any circumstances with PR-820 or other primers or coatings that contain glycol ethers.

PRETREATMENT AND CLEANING OF SUBSTRATE

Prior to coating with PR-820, 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 60°C for 10 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 PR-820 to other substrates, please contact SDC.

SOLUTION MANAGEMENT

For optimum performance, PR-820 coating solution should be maintained in a % solids range of 6.0 - 8.0%. 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 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 PR-820 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 PR-820 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. All orders are shipped ex works/F.O.B. Additional shipment charges including customs clearance and fees (if applicable) are the responsibility of the customer.

SDC TECHNOLOGIES CONTACT INFORMATION

Corporate Headquarters - USA
45 Parker, Suite 100
Irvine, California 92618 USA
800-272-7681 (Toll-Free USA)
+1-714-939-8300
technicalsupport.ca@sdctech.com

Europe Office
Unit 7, Avondale Industrial Estate
Pontrhydyrun, Cwmbran
NP44 1UG, Great Britain
+44-1633-627030
technicalsupport.eu@sdctech.com

China Office
No. 1585 Gumei Road
Xuhui District
Shanghai 200233
China
+86-21-61517768
customercare.cn@sdctech.com

Singapore Office
27 Tuas South Street 1
Singapore 638035
+65-6210-6355
customercare.ap@sdctech.com

sdc Technologies

sdctech.com

202292_PR-820

Mitsui Chemicals Group