



Technical Data Sheet

CrystalChrome® Ultra PR

Multi-Purpose Water-Based Primer

DESCRIPTION

CrystalChrome® Ultra PR is a 1.50 refractive index water based primer.

FEATURES

- Adhesion promoter for PC
- Water based formulation
- Low VOC content

STORAGE AND USE

The recommended storage temperature for CrystalChrome Ultra PR is 20 - 25°C (68 - 77F). When stored at this temperature in the original closed container, it is recommended to start using CrystalChrome® Ultra PR within 6 months of the date received.

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	19 - 21%
Viscosity @ 25°C	≤40 cP
Density @ 25°C	1.02 - 1.03 g/ml
Solvents: Water, EB Glycol Ether, PM Glycol Ether, NMP	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	5.0 - 6.0 µm
Refractive Index	1.50
Adhesion	100 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 35 - 60 % RH
Air Flow	Filtered, Laminar (Class 100)
Coating Temperature	16 - 18 °C
Coating Filtration	5 - 10 µm absolute
Extraction Speed	3.0 - 5.0 mm/s
Dry Time/Temperature	10 min @ 100 °C



CrystalChrome® Ultra PR

Multi-Purpose Water-Based Primer

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



sdctech.com

CrystalChrome® is registered trademark of SDC Technologies.

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

©2024 SDC Technologies, Inc. All rights reserved. SDC Technologies is a wholly-owned subsidiary of Mitsui Chemicals, Inc.

20220706_CCPR Ultra

EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of CrystalChrome Ultra PR 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 PM Glycol Ether rinse. PM Glycol Ether should also be used for cleaning equipment after the use of CrystalChrome Ultra PR.

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

PRETREATMENT AND CLEANING OF SUBSTRATE

Prior to coating with CrystalChrome Ultra PR, parts should be clean and free of any surface residues. The parts should be immersed in a 2 - 10% aqueous solution of sodium / potassium hydroxide or detergent at 25 - 50°C for 1 to 10 minutes. A typical treatment would be 3% 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.

SOLUTION MANAGEMENT

For optimum performance, CrystalChrome Ultra PR coating solution should be maintained in a % solids range of 18.5 - 21.5 %. 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 SM-1020 or a 40/60 mixture of de-ionized water and PM Glycol Ether.

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 CrystalChrome Ultra PR 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 CrystalChrome Ultra PR 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.

ISO 9001:2015 and ISO 14001:2015 Certified