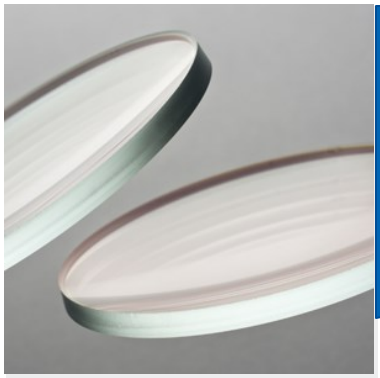

Technical Data Sheet

CrystalChrome® S BN

Photochromic Spin Coating - Brown

DESCRIPTION

CrystalChrome® S BN is a solvent based photochromic coating that is designed for spin coat application on ophthalmic lenses.

FEATURES

- Photochromic Brown
- Designed for spin coating application
- Compatible for use with Polycarbonate, ADC, Trivex®, Mid-Index Acrylic, MR-8™, MR-7™, MR-10™ and MR-174™.
- Compatible with CrystalChrome® HC abrasion resistant coating.

STORAGE AND USE

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

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	26 - 28 %
Viscosity @ 25°C	70 - 90 cP
Solvents: PM Glycol Ether	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	5.0 - 5.5 µm
Refractive Index	1.50
Adhesion (with CrystalChrome®HC)	100 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 30 - 55 % R.H.
Air flow	Hepa air filter
Application Spin Speed	3 s @ 400 - 500 rpm
Spin-off speed 1	50 s @ 400 - 500 rpm
Spin– off speed 2	3 s @ 1200 - 1500 rpm
Pre-cure (lens temperature)	60 s @ 60 - 80°C
Thermal Cure*	4 hrs @ 110°C

*Thermal cure refers to final cure after application of CrystalChrome HC

sdc Technologies

CrystalChrome® S BN

Photochromic Spin Coating - Brown

EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of CrystalChrome S BN 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 S BN. It is important to be sure all solvent has been completely removed/dried from coating bowl, tubing, and pump before adding coating.

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

Equipment Environment: It is recommended to place coating machine in a clean environment and in a separate area from edging or polishing equipment. Recommended conditions for lab environment are 20-25°C (68-77°F) and 30-55% relative humidity.

SAMPLE PREPARATION

Prior to coating with CrystalChrome S BN parts should be clean and free of any surface residues. A recommended process would be to clean with isopropanol, then use an inline cleaning system that contains mild aqueous caustic detergent. This cleaning should be followed by city water rinsing, then DI water rinsing and drying. Lenses should be completely clean, dry, and cooled before coating application. Please contact an SDC representative for further details on lens cleaning.

SOLUTION MANAGEMENT

For optimum performance, CrystalChrome S BN coating solution should be maintained in a % solids range of 26 - 28%. 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 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 S BN 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 S BN 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

Mitsui Chemicals Group

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

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