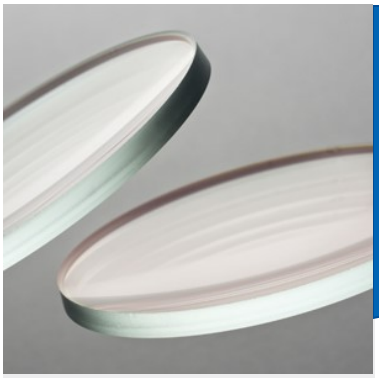

Technical Data Sheet

CrystalCoat® C-410

1.62 Refractive Index Abrasion Resistant Coating

DESCRIPTION

CrystalCoat® C-410 is a 1.62 refractive index abrasion resistant hardcoat.

FEATURES

- Abrasion Resistance
- Refractive index of 1.62
- Excellent adhesion on various high index substrates including MR-8™, MR-7™, MR-10™
- AR compatible

STORAGE AND USE

Recommended storage temperature for C-410 is 4°C (40°F). When stored at this condition in the original unopened container it is recommended to start to use C-410 within three (3) months of the date received. For extended periods (3-6 months) of storage C-410 should be stored at -18°C (0°F).

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	29 - 31 %
Viscosity @ 25°C	≤ 8.0 cP
Density @ 25°C	1.01 - 1.09 g/ml
Solvents: Water, Methanol, PM Glycol Ether	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	2. 0 - 3.5 µm
Refractive Index	1.62
Steel Wool Abrasion Resistance	Good
Bayer	≥3
Adhesion	100 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 40 - 60% RH
Air Flow	Filtered, Laminar (Class 100)
Coating Temperature	16 - 18°C
Coating Filtration	1 - 5 µm absolute
Extraction Speed	2.5 - 4.2 mm/s (6 - 10 in/min)
Dry Time/Temperature	10 - 30 min @ 20 - 25°C 10 min with Infra-red
Cure Conditions	1.5 hrs @ 120°C

sdc Technologies

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EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of C-410 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 C-410.

Equipment Materials: All equipment surfaces that are exposed to C-410 should be constructed of stainless steel, polypropylene or Teflon®. Other materials should be tested for compatibility with C-410 prior to use. Materials made with polyvinyl chloride (PVC) should not be used under any circumstances with C-410 or other primers or coatings that contain glycol ethers.

PRETREATMENT AND CLEANING OF SUBSTRATE

Prior to coating with C-410, parts should be clean and free of any surface residues. Substrate should be cleaned in a 5 - 10% aqueous solution of sodium or potassium hydroxide at 50 - 60°C for 5 - 10 minutes. This cleaning should be followed by city water rinsing, then DI water rinsing and drying. Lenses should be completely clean, dry, and cooled before application of any coating or primer.

The application of C-410 on MR-174™ and polycarbonate requires the use of a primer. For help in selecting a primer, please contact SDC.

For information regarding application of C-410 to other substrates, please contact SDC.

SOLUTION MANAGEMENT

For optimum performance, C-410 should be maintained in a solids range of 29 - 31%. Higher or lower solids may 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 an 80/20 mix of Methanol and PM Glycol Ether (SM-345).

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 C-410 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 C-410 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.

Mitsui Chemicals Group