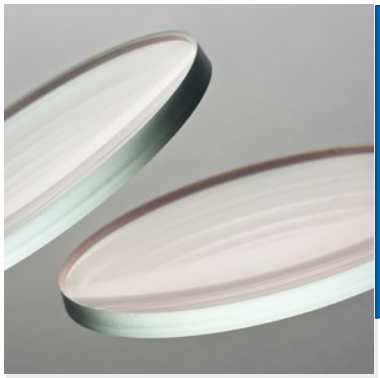

Technical Data Sheet

CrystalCoat® UV MP-1230

Abrasion Resistant UV-Cure Coating

DESCRIPTION

CrystalCoat® UV MP-1230 is a 1.49 refractive index abrasion resistant UV cured hardcoat.

FEATURES

- Abrasion Resistance
- Optical Clarity
- Flexibility
- Primer-free Adhesion to Polycarbonate and PET
- Compatible with anti-reflective and metalizing treatments

STORAGE AND USE

Recommended storage temperature for UV MP-1230 is 4°C (40°F). When stored at this temperature it is recommended to use UV MP-1230 within three (3) months of the date received.

SOLUTION PROPERTIES

PROPERTY	TYPICAL VALUES
Solids	65 - 70 %
Viscosity @ 25°C	≤20 cP
Density @ 25°C	1.01 - 1.06 g/ml
Solvents: Isopropanol, Ethanol, Water	

CURED COATING PROPERTIES

PROPERTY	TYPICAL VALUES
Coating Thickness	5 - 10 µm
Refractive Index	1.49
Adhesion	100 %
Bayer Ratio (on CR-39®)	≥ 1.3
Taber Abrasion Δ Haze @ 100 revolutions Δ Haze @ 500 revolutions	 ≤ 4.0 % ≤ 11.0 %

RECOMMENDED OPERATING GUIDELINES

PROPERTY	TYPICAL VALUES
Environmental Conditions	20 - 25°C, 35 - 50% RH
Air Flow	Filtered, Laminar (Class 100)
Coating Temperature	16 - 18°C
Coating Filtration	1 - 5 µm absolute
Extraction Speed	5 - 6 mm/s
Dry Time	5 - 10 mins air dry
Cure Conditions (as measured by EIT UV Power Puck)	800 - 900 mJ/cm^2

sdc Technologies

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EQUIPMENT PREPARATION

Equipment Cleaning: Coating equipment should be cleaned prior to use of UV MP-1230 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 Isopropanol. Isopropanol should also be used for cleaning equipment after the use of UV MP-1230.

Equipment Materials: All equipment surfaces that are exposed to UV MP-1230 should be constructed of stainless steel, polypropylene or Teflon®. Other materials should be tested for compatibility with UV MP-1230 prior to use. Materials made with polyvinyl chloride (PVC) should not be used under any circumstances with UV MP-1230 or other primers or coatings that contain glycol ethers.

PRETREATMENT AND CLEANING OF SUBSTRATE

Prior to coating with UV MP-1230, parts should be clean and free of any surface residues. Polycarbonate parts that are injection molded should be cleaned with a neutral detergent solution to remove any residues left on the parts from the molding process, and then rinsed thoroughly with de-ionized water.

SOLUTION MANAGEMENT

For optimum performance, UV MP-1230 should be maintained in a solids range of 65 - 70. 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 isopropanol.

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 UV MP-1230 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 UV MP-1230 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

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