



UVEXS Incorporated

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The brightest ideas in UV curing

450 SERIES

UV Curable Decorative Coatings

DESCRIPTION

For decorative applications requiring a coating with durability and mild flexibility, the 450 series are excellent UV curable replacements for standard air-dry urethanes or acrylics. Rapidly cures to a glossy finish when exposed to high intensity UV energy. The single part formulas contain no solvents, require no mixing and have no VOC by-products. They resist tears and scratches, yet are not brittle. May be dipped or dispensed onto a variety of substrates including paper stock, metals and some plastics. Preheating the coating will lower the viscosity if desired for application adjustment.

450A standard gloss coating
(previous number: 15D47-4)

CURE SCHEDULE

Expose with a medium pressure mercury vapor type lamp operating at a minimum of 200 watts per inch input power:

Minimum required intensities*:
30 mW/cm² @ 254 nm
120 mW/cm² @ 365 nm

Exposure time: <6 seconds, depends on application thickness.

*Using a UVEXS PM 600 radiometer

APPLICATION

450 Series coatings are supplied in liter, gallon or 5 gallon pails. Apply the coating to flat or three-dimensional objects by dip, brush or flow coat methods, or by pneumatic dispense. 450 Series coatings are not intended for spray application. Surfaces should be free of dust or oily residues for maximum adhesion. Recommended application thickness is 1 to 75 mils.

UNCURED PROPERTIES

Base resin: acrylated epoxy
Solids: 100%
Components: one, no solvents
Color: clear, light straw
Odor: mild
Specific gravity: 1.01
Flash point: >200°F
Viscosity*: 3000 cps

*Brookfield Model LVF, 20°C

CURED PROPERTIES

Hardness: 68 (shore D)
Elongation: 15%, at break
Tensile: 2800 psi, at break
Abrasion resistance: moderate, 0000 steel wool (5 rubs)
Gloss factor: 60°: 75+
Refractive index: 1.49

STORAGE AND HANDLING

Shelf life is warranted for a minimum of 6 months from date of shipment when stored in darkness at 50 to 75°F, in its original container.

Avoid contact with skin and eyes as directed on the MSDS. Use with adequate ventilation. Clean uncured material from work surfaces and dispensing equipment with standard solvents (IPA, MEK or acetone).