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Optical Solution Provider

TECHNICAL DATA SHEET

EFIRON® Polymer Clad Series

XPC-373HV



53, Jiwon-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Korea Tel) +82-31-365-3680 Fax) +82-31-365-3681 http://www.fospia.com

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A. MATERIAL DESCRIPTION

EFIRON[®] XPC-373HV coating is a radiation-curable acrylate useful for polymer cladding making processes. EFIRON[®] XPC-373HV coating has suitable glass transition temperature, rapid cure property, non-yellowing, thermal resistance, high oxidative and hydrolytic (moisture) stability, which are required by optical fiber industry applications.

1. CURING CONDITION

Minimum UV dose of EFIRON® XPC-373HV for complete cure is 1000 mJ/cm² under a nitrogen environment. However, the minimum dosage is heavily dependent upon the thickness of the PC layer.

2. STORAGE

EFIRON® XPC-373HV polymer cladding coating can polymerize under improper storage conditions. Store materials away from direct sunlight and presence of oxidizing agents and free radicals. Storage temperature range is between $10\,^{\circ}\mathrm{C}$ to $30\,^{\circ}\mathrm{C}$.

3. PRECAUTION

EFIRON® XPC-373HV polymer cladding coating materials can cause skin and eye irritation after contact. Therefore, avoid direct contact with these materials. If contact occurs, immediately rinse affected areas copiously with water.

4. NOTES

The information contained herein is believed to be reliable but is not to be taken as representation, warranty or guarantee and customers are urged to make their own tests.

B. MATERIAL PROPERTIES

1. LIQUID

Viscosity at 25 $^{\circ}$ C 4,900 cPs Density at 20 $^{\circ}$ C 1.52 g·cm⁻³ Refractive Index at 25 $^{\circ}$ C, 589 nm 1.369 Surface Tension In Testing

2. CURED

Refractive Index at 852 nm 1.373 Glass Transition Temperature 71 °C At Tan_delta Max Secant Modulus At 2.5% Strain 190MPa(In Testing) Tensile Strength at Break 12 MPa(In Testing) Elongation at Break 12.0 %(In Testing) Water Sensitivity (24 Hour, 50 ℃) Weight Change In testing Extractable In testing Coefficient of Expansion Glassy Region In testing Rubbery Region In testing Shrinkage on Cure <10.0 %

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