

Optical Solution Provider

TECHNICAL DATA SHEET

EFIRON® Polymer Clad Series

HDC-370



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A. MATERIAL DESCRIPTION

EFIRON[®] HDC-370 coating is a radiation-curable acrylate useful for polymer cladding making processes. EFIRON[®] HDC-370 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® HDC-370 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® HDC-370 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® HDC-370 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 ℃	6,000 cPs
Density	at 20 ℃	1.52 g⋅cm ⁻³
Refractive Index at 25 ℃, 589 nm		1.365

2. CURED

Refractive Index at 852 nm 1.370

Glass Transition Temperature

At Tan_delta Max In testing

Secant Modulus

At 2.5% Strain

20 MPa

Tensile Strength at Break

Elongation at Break

120 %

Glass Adhesion 2.3 N/25mm

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