

TECHNICAL DATA SHEET

EFIRON[®] Polymer Clad
Series

HDC-382



FOSPIA CO., LTD

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

CONTENTS

- A. MATERIAL DESCRIPTION

- B. MATERIAL PROPERTIES
 - 1. Liquid
 - 2. Cured

A. MATERIAL DESCRIPTION

EFIRON[®] HDC-382 coating is a radiation-curable acrylate useful for polymer cladding making processes. EFIRON[®] HDC-382 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-382 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-382 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°C to 30°C.

3. PRECAUTION

EFIRON[®] HDC-382 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 °C | 6,000 cPs |
| Density | at 20 °C | 1.52 g·cm ⁻³ |
| Refractive Index | at 25°C, 589 nm | 1.377 |

2. CURED

| | | |
|------------------------------|-----------|------------|
| Refractive Index | at 852 nm | 1.382 |
| Glass Transition Temperature | | |
| At Tan_delta Max | | In testing |
| Secant Modulus | | |
| At 2.5% Strain | | 112 MPa |
| Tensile Strength at Break | | 10 MPa |
| Elongation at Break | | 50 % |
| Glass Adhesion | | 2.0 N/25mm |

The information contained herein is believed to be reliable but is not to be taken as a representation, warranty or Guarantee. Customers are urged to perform their own process and QC tests.