

TECHNICAL DATA SHEET

EFIRON[®] LS-2100

FOSPIA CO.,LTD

53, Jiwon-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Korea
Tel) +82-31-365-3697 Fax) +82-31-365-3681
<http://www.fospia.com>

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A. MATERIAL DESCRIPTION

EFIRON[®] LS-2100 is Secondary coating for Glass Optical fiber. EFIRON[®] LS-2100 has suitable glass transition temperature, anti-scratch, abrasion resistance, rapid cure property, free-point lump, water and chemical resistance, low volatilization, high oxidative and hydrolytic (moisture) stability which are required by optical fiber industry application.

1. CURING CONDITION

EFIRON[®] LS-2100 has fast cure speed so it can be applied to 3,000 m/min line. The minimum UV dose for complete cure is about 0.2~0.3 J/cm² (UV-A range) under the nitrogen environment.

2. STORAGE

EFIRON[®] LS-2100 can be polymerized 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. Shelf Life

EFIRON[®] LS-2100 has a recommended shelf life of 12 months from the date of manufacture, provided that the above stated storage conditions are properly maintained.

4. Precaution

EFIRON[®] LS-2100 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.

5. 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 Coating

Viscosity	at 25 °C	5,000 cPs
	at 35 °C	2,400 cPs
Density	at 23 °C	1.12 g·cm ⁻³
Refractive Index	at 25°C	1.51
Gel Flow Time	at 23 °C	37 sec
Surface Tension	at 25°C	23 dynes·cm ⁻¹
Crystallization Temperature	at -60~80 °C	Not Detect

2. Cured Coating

Test at <1% R.H

Glass Transition Temperature	
at Tan_delta Max	75 °C Elastic

Test at 23°C, 50% R.H

95% Cure Energy	0.22 J·cm ⁻²
Secant Modulus at 2.5% Strain	1100MPa
Tensile Strength	35 MPa
Elongation	6 %
Refractive Index at 852nm	1.5247

* Cured condition : D-bulb, 1J/cm²(UV-A Range : 315-400nm)

* Film preparation : 75 μm thickness film conditioned for 24hrs in 23 °C/50% R.H

