

- Electron Injection Layer(EIL) Materials / Metal (5) ----- 351
- ITO Glass / Bare Glass ----- 352
- Sealing Materials ----- 354

LT-E001 | LiF

Lithium fluoride

CAS No. : 7789-24-4
Grade : > 99.99%
Formula : LiF
M.W. : 25.94 g/mole
Melting Point : 848 °C
Boiling Point : 1681 °C

LT-E002 | Cs₂CO₃

Cesium carbonate

CAS No. : 534-17-8
Grade : > 99.994%
Formula : Cs₂CO₃
M.W. : 325.82 g/mole
Melting Point : 610 °C

LT-E003 | MoO₃

Molybdenum(VI) Oxide

CAS No. : 1313-27-5
Grade : > 99.998%
Formula : MoO₃
M.W. : 143.94 g/mole
Melting Point : 795 °C

LT-E004 | CsF

Cesium fluoride

CAS No. : 13400-13-0
Grade : > 99%
Formula : CsF
M.W. : 151.90 g/mole
Melting Point : 682 °C

LT-E005 | Al

Aluminium

CAS No. : 7429-90-5
Grade : > 99.999%
Formula : Al
M.W. : 26.98 g/mole
Melting Point : 660 °C

We can supply OLED, OPV grade ITO, Indium Tin Oxide, transparent conductive coated glass. The ITO is deposited onto polished soda lime float glass in two standard smooth thicknesses giving 9~15 ohms per square and 4~6 ohms per square. Then SiO₂ barrier coating is deposited between the ITO and glass.

Including custom photomask, we can supply the ITO glass cutting, cleaning and patterning service to customer requirements. The specialized pattern masking process is used which allows us to offer quantities ranging from small scale prototyping of research requirements to full scale production volumes.

- ITO glass specification and patterning process

Product No.	LT-G001	LT-G002
ITO Thickness	: 1200~1600Å	: 3100~3700Å
ITO Resistance	: 9~15 Ω/sq	: 4~6 Ω/sq
ITO Transparency	: >84% (at 550nm)	: >78% (at 550nm)
Material	: Polished soda lime glass	
Size	: 370*470 mm or Customize	
Glass Thickness	: 0.7 or 1.1 mm	: 0.7 mm
SiO ₂ Thickness	: ≥ 200Å	
R _a	: Less than 6 nm	
R _{max}	: Less than 35 nm	



We also provide cleaning service of bare and sandblasted glass for the use of cover. Smaller pieces of the cover glasses can be cut and based on customers requirements.

- Glass cover specification and cleaning process
(Bare glass / Sandblasted glass)

Product No.	LT-Cover
Size	: 370*470 mm or Customize
Thickness	: 0.7 or 1.1 mm
Mohs Hardness	: 6.5
Thermal Expansion	: 85-90 (at 20 ~ 350 °C)
Specific Heat	: 0.19 cal/g °C (at 0 ~ 50 °C)
Transmittance	: > 90%
Resistivity	: 15.3 Log Ω-cm (at 25 °C), 7.3 Log Ω-cm (at 250 °C)



- W Boat

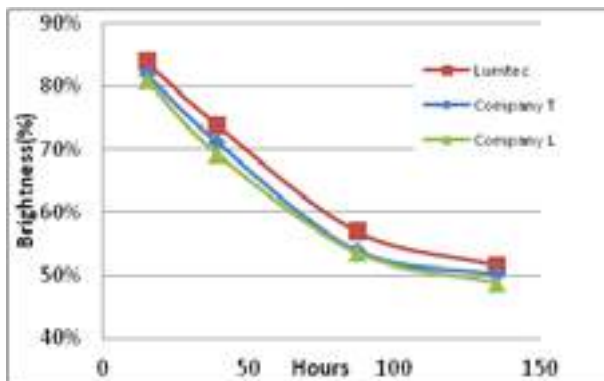
LT-M310 : 100×10×0.3mm

UV Curing Adhesives for Sealing Application

Curing Type	UV	
Coating System / Type	Dispense / Edge sealing	
Product	LT-U001	
Main contents	Epoxy resin / Polymer	
Store	in 0~4°C	
Before		
Appearance	Milky white	
Density @25C	1.4 g/cm ³	
Viscosity @25C	200 Pa.s	
After hardening		
WVTR	Cup method	4 g/m ² -24h
	(JIS Z 0208) 40C/90%RH	
Outgas	Head space GC-MS	< 20 ug/resin
Tensile Shear Strength	Autograph Glass/Glass sub.	Material failure
Tg	DSC	120°C
Low coefficient of linear expansion	TMA	< 6.0 X 10 ⁻⁵ /°C
Hardening condition (std.)	6 J/cm ² + 80 °C/1h	

UV curing adhesives not only bond materials together but they can also be used to seal and coat products. Also, it adheres well to glass surfaces. This product is cured after exposing to UV radiation. To obtain full cure on surfaces exposed to air, radiating wavelength at 365nm is effective.

Application Data



Lumtec provides custom synthesis tailored to customers' specific needs in research and study. With the certification of ISO 9001 and 14001, Lumtec aims to provide our customers the best service. All inquiries of custom synthesis will be submitted to our technicians for thorough evaluations. The specification of custom products (product volume, purity, Mw, etc.) will be confirmed and agreed before the production proceeds. If necessary, non-disclosure agreements or other business agreements could be arranged and signed.

During the production we will keep our customers well-informed about the synthesis status. Analysis reports of the custom products such as HPLC, Ms, COA, etc. can be provided upon request.

Capacity and Equipment

- Capacity
 - 500 kg/month (production line)
 - 100 kg/month (sublimation line)
- Production Equipment
 - 30-500 L reactors
- Sublimation Equipment
 - 6-8 inch quartz tubes
- Analysis Equipment
 - HPLC, NMR, LC-Ms, GPC, TGA, UV, PL, etc.
- Device Evaluation
 - Lithographically Patterned ITO Equipment (Clean Room: Class 100)
 - Vacuum Deposition Equipment (Clean Room: Class 1000)

Specific Reaction

- Ullmann reaction
- Cyanation reaction
- Elimination reaction
- Friedel-Crafts reaction
- Alkylation/Acylation
- Grignard reaction
- Wittig reaction
- Sandmeyer reaction
- Sonogashira reaction
- Suzuki reaction
- Baeyer-Villiger Oxidation
- Vilsmeier reaction
- Williamson reaction
- Catalytic hydrogenation
- Knoevenagel condensation