

New Liquid Type Desiccant for OLED

“OleDry”

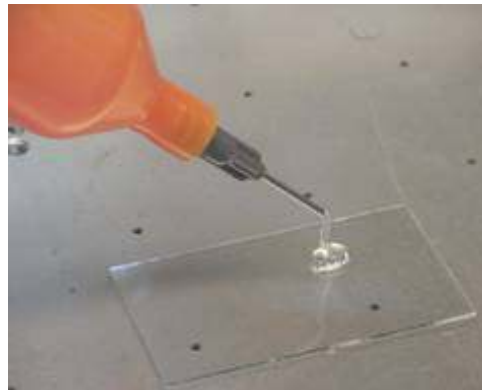


OleDry-S: For Cavity Encapsulation
OleDry-F: For Filling Encapsulation

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What's Futaba "OleDry"

- ❑ Coatable, Transparent, Liquid type desiccant for OLED.
- ❑ Suitable for dispensing or printing process.
- ❑ Applicable to various panel size and shapes.
- ❑ Water desorption free, due to the chemical reaction on moisture absorption.
- ❑ Transparency is over 95%, applicable for top emission type OLED.
- ❑ Two types of OleDry are available - Cavity and Filling encapsulation



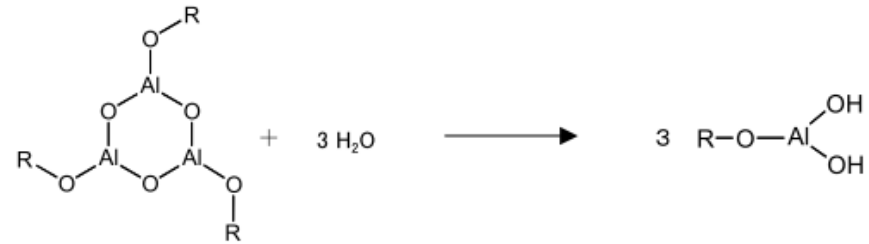
Lineup of Futaba "OleDry"

	OleDry-S	OleDry-F
Encapsulation	Cavity	Filling
Process	Coating / Drying by heating (180 deg C-10min)	Coating (Dry Processless)
Viscosity	400,000 mPa·s (Typ.)	80,000~500,000 mPa·s <i>(Adjustable)</i>
Transparency	>95% (400~800nm)	
Reflective index	1.4~1.5 (400~800nm)	

Fundamental Performance of "OleDry"

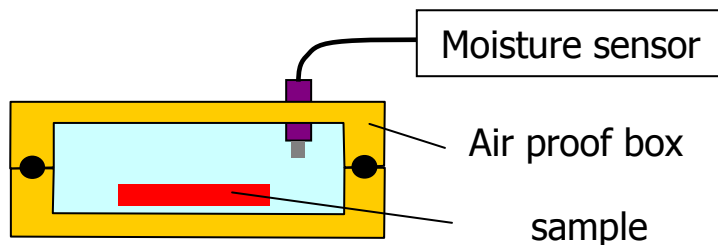
Reaction with Water

The reaction with water is mainly an addition reaction.

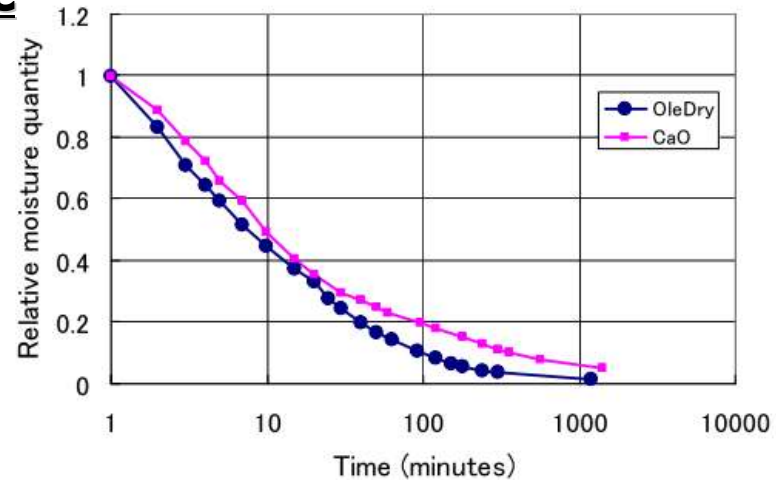


Moisture Absorption Characteristic

Performance is equivalent to CaO sheet type desiccant.

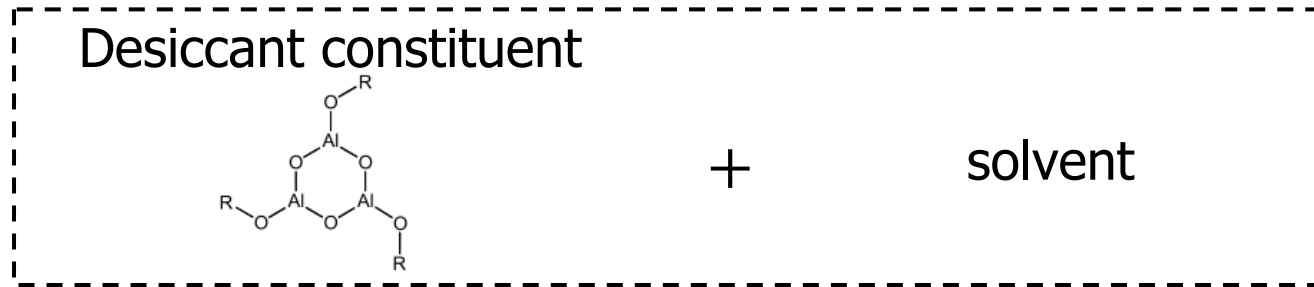


Measurement System

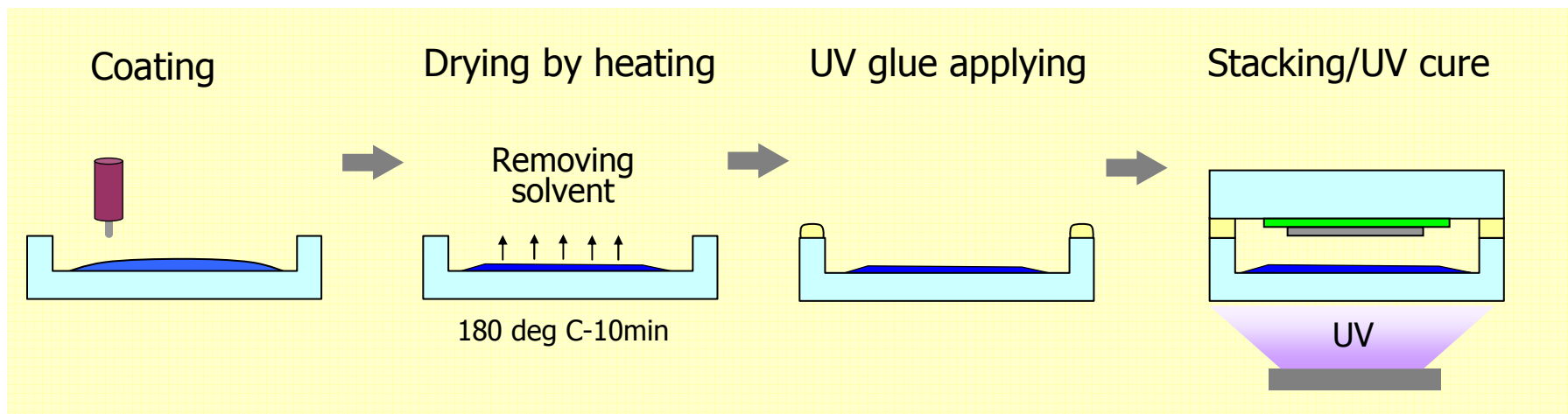


OleDry-S: For Cavity Encapsulation

Material Constitution

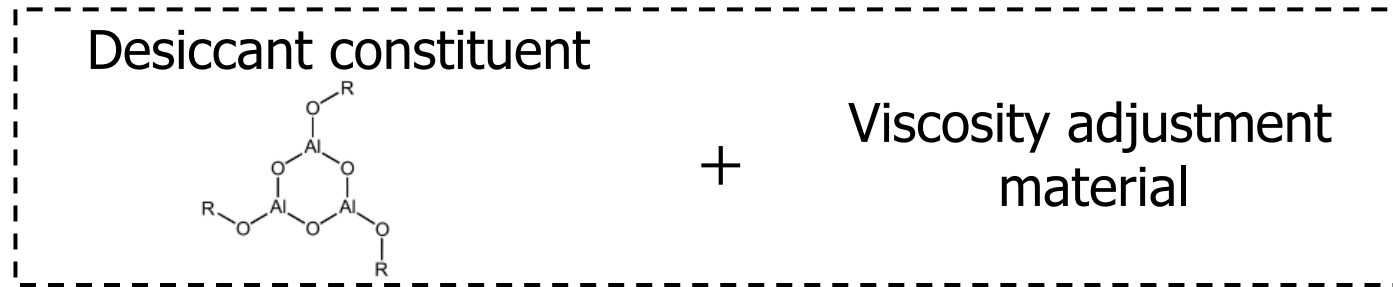


Coating and Packaging Process (example)

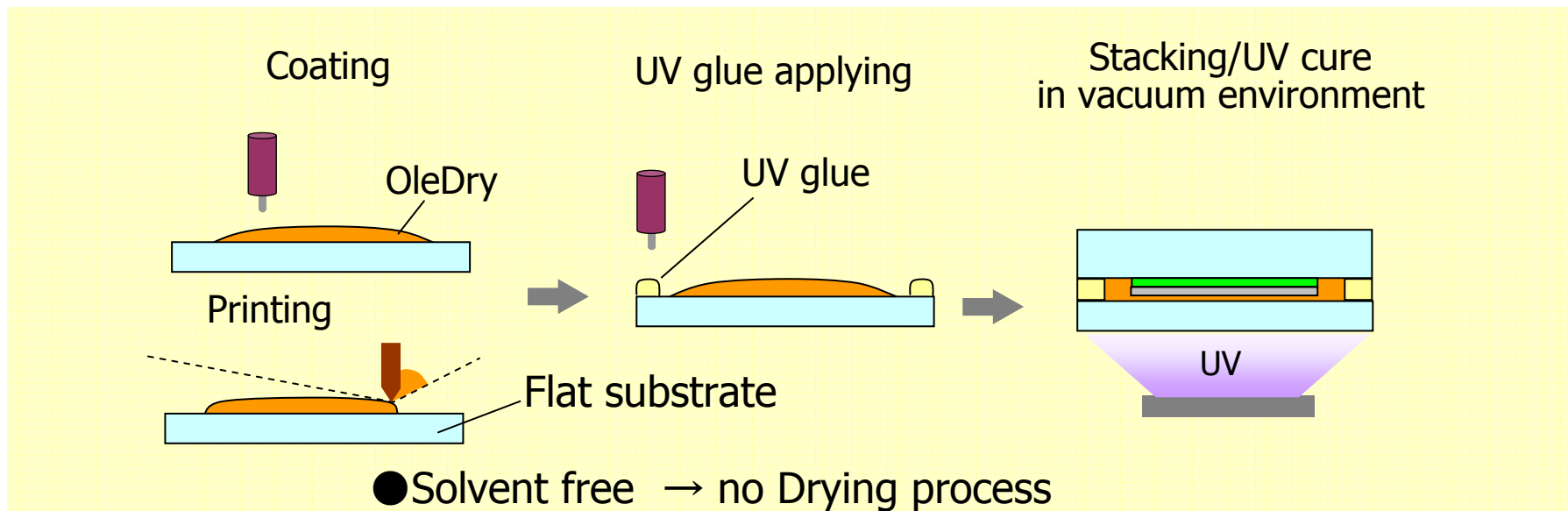


OleDry-F: For Filling Encapsulation

Material Constitution



Coating and Packaging Process (example)



Advantage of Filling Encapsulation

- Suitable for large size and/or top emission type OLED.
- Higher panel strength with OleDry-F.
- Longer emission lifetime due to better heat radiation.
- Lower total cost due to no requirement to use a back side glass with a cavity for solid desiccant placement.

