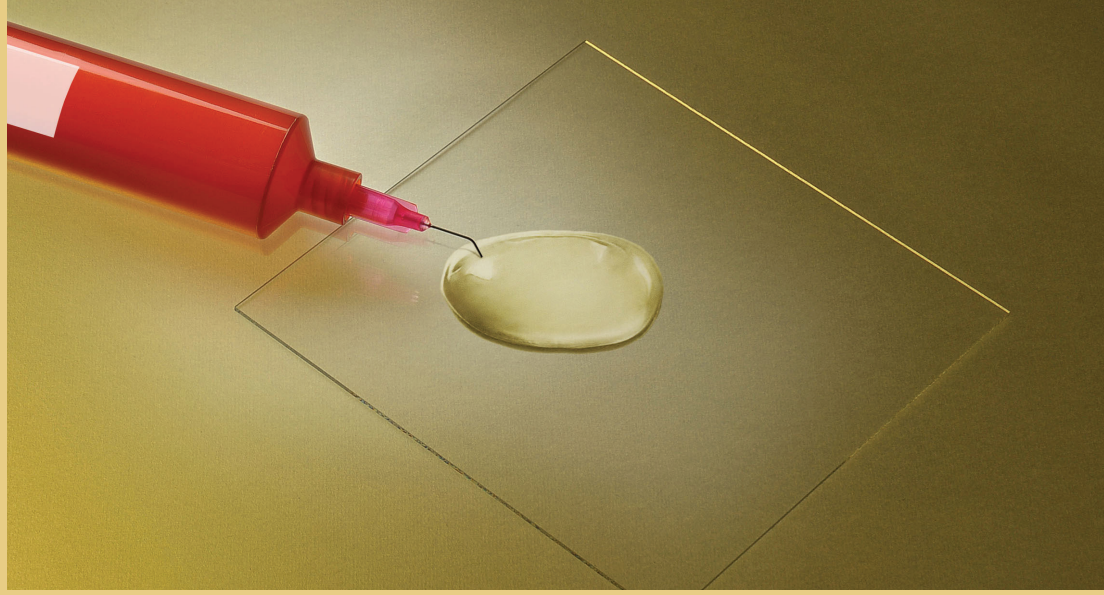


# ZetaFill-F3 LV-T1 Active Filler



## HIGHLIGHTS

### General Features

- High moisture barrier to assure long life to organic devices
- The material can be used as film but typically as filler
- Compatibility with ODF production process
- Thermally curable

### Applications

- Active Matrix OLED displays
- Passive Matrix OLED displays
- OLED lighting systems
- Organic photovoltaic devices
- Organic sensors
- OFETs
- OLETs
- Organic lasers
- Flexible organic devices



## Product description

ZetaFill™-F3/LV-T1 is a low-viscosity thermally curable dispensable dryer, designed for use in OLED and organic electronics applications. Due to its viscosity it can be applied by blading or syringe.

ZetaFill-F3/LV-T1 films work as irreversible moisture getter up to 180 °C.

## ZetaFill-F3 Moisture Sorption

Calculation example

Sorption capacity in air: 1% of dry weight

$1\text{cm} \times 1\text{cm} \times 50\ \mu\text{m} = 0.005\ \text{cm}^3 \times 1.9\ \text{g/cc} = 0.0095\ \text{g} = 9.5\ \text{mg}$

Moisture capacity =  $9.5\ \text{mg} \times 1\% = 0.095\ \text{mg}$

Material Property	Typical value	
	Paste	Cured Film
Appearance	Whitish-yellow liquid	
Viscosity at 25°C (cP) (*)	4,000	NA
Density (g/cm <sup>3</sup> )	1.9	1.9
Moisture capacity (wt %)	1	1
Maximum particle size (µm)	<1	<1
Storage temperature (°C)	2 - 5	-30 - + 120
Shelf life (months)	3	NA
Pot life (RT, < 10 ppm H <sub>2</sub> O) (days)	5	NA
Storage atmosphere	Dry if bag is opened	Dry

(\*) at a shear rate of  $5\ \text{s}^{-1}$

## Processing

Bring ZetaFill-F3/LV-T1 to room temperature before use.

A filtration process is not recommended in order to avoid particle aggregation.

Process temperature higher than 100 °C has to be avoided.

## Deposition

Deposition has to be carried out under nitrogen or dry air atmosphere.

Apply via blading or dispense by syringe on the desired surface.

Compatible surfaces are

- Glass
- Stainless Steel and other metals
- Plastics

## Curing

- Suggested curing conditions are: 100 °C for 60 minutes (or 150 °C for 30 minutes; 80 °C for 90 minutes)
- Inert flowing gas or vacuum is required
- No outgassing is observed during curing
- Shrinkage about 4 %

## Shipping and Storage

ZetaFill-F3/LV-T1 shelf life is >3 months (keeping the barrier bag sealed).

ZetaFill-F3/LV-T1 must be stored between 2 and 5 °C and placed at RT for 2 hours before usage.

Pot life at RT is 5 days.

## Ordering Information

Code: 5X0959    Description: ZETAFILL-F3/LV-T1/SMT10 (Musashi syringe - 10cc )

# ZetaFill-F3/LV-T1

## Active Filler

The SAES Group manufacturing companies are ISO9001 certified, the Asian and Italian companies are also ISO14001 certified. Full information about our certifications for each company of the Group are available on our website at: [www.saesgroup.com](http://www.saesgroup.com)

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