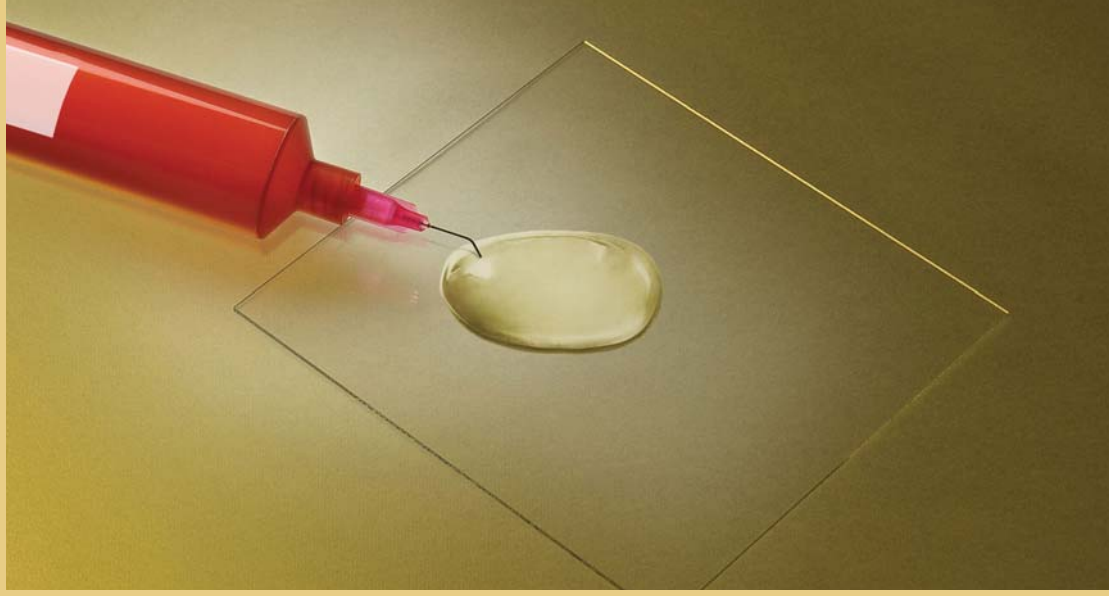


# ZetaFill-F3 HV-N Active Filler



## 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
- High viscosity gel, no curing

### 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/HV-N is a high-viscosity 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/HV-N films work as irreversible moisture getter up to 180 °C.

## ZetaFill-F3/HV-N Moisture Sorption

Calculation example

Sorption capacity in air: 1.4% 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 =  $9.5\ \text{mg} \times 1.4\% = 0.33\ \text{mg}$

Material Property	Typical value
	Paste
Appearance	Whitish-yellow liquid
Viscosity at 25 °C (cP) (*)	16,000
Density (g/cm <sup>3</sup> )	1.9
Moisture capacity (wt %)	1.4
Maximum particle size (µm)	<1
Storage temperature (°C)	2 - 5
Shelf life (months)	6**
Storage atmosphere	Dry if bag is opened
Pot life (@RT, months)	>1

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

(\*\*) tests are ongoing. Expected shelf-life is >6 months

## Processing

Bring ZetaFill-F3/HV-N 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

ZetaFill-F3/HV-N is a not curable formulation

## Shipping and Storage

Tests are ongoing to evaluate ZetaFill-F3/HV-N shelf life: expected shelf-life is >6 months (keeping the barrier bag sealed).

ZetaFill-F3/HV-N must be stored between 2 and 5 °C and placed at RT for 2 hours before using.

Pot life at RT is > 1 months.

## Ordering Information

Code: 5X0967    Description: ZETAFILL-F3/HV-N/B500 (Bottle - 500cc )

# ZetaFill-F3/HV-N

## 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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