ZetaFill™ HC

Active Filler Dryer

HIGHLIGHTS

General Features

- ☐ High capacity filler to ensure long life time to electronics/photonics devices
- ☐ Designed to stay in direct contact with the sensitive parts of the device
- ☐ Compatibility also with ODF production process
- ☐ Medium viscosity gel, no curing

Applications

- ☐ Active Matrix OLED displays
- ☐ Passive Matrix OLED displays
- ☐ OLED lighting systems
- ☐ Semi-hermetically encapsulated electronics
- ☐ Organic photovoltaic devices
- ☐ Sensors
- ☐ OFETs
- ☐ Flexible organic devices

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Product Description

ZetaFill™ HC is a high capacity dispensable dryer, designed for Electronics, Photonics and Organic Electronics applications. ZetaFill HC is a dispersion of SAES Getters proprietary engineered irreversible getters in a perfluorinated matrix. It is a medium viscosity, non-curable dispensable dryer, suitable for many different device architectures.

Material Property	Typical value
Appearance	Whitish liquid
Viscosity at 25 °C (cP) (*)	4,300
Density (g/cm^3)	1.9
Moisture capacity (wt %)	3.2
Maximum particle size (mm)	$X_{90} < 5$
Decomposition temperature (°C)	300
Storage temperature (°C)	2 to 5
Shelf life (months)	18
Pot life (RT, < 10 ppm H_2O) (days)	7
Storage atmosphere	Dry air or Nitrogen

(*) at a shear rate of 45 s^{-1}

How it Works

ZetaFill HC can be deposited in the free volume of the device, filling the free space. It works immediately as an irreversible moisture getter. For this reason, deposition has to be carried out under nitrogen or dry air atmosphere. Apply via blading or dispense by syringe on the desired surface. Curing is not necessary.

Dispensing Parameters

Typical deposition parameters (referred to a dispensed line width of 0.5mm to 2 mm):

- Needle (conical): 254 um
- Pressure: 20 psi
- Speed: 20 mm/s
- Dispense gap: 0.4 mm

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Additional Processing and Storage Information

Bring ZetaFill HC to room temperature before use. A filtration process is not recommended in order to avoid particle aggregation.

Compatible surfaces are

- Glass
- Stainless Steel and other metals
- Polymer films (e.g. PET, PI, PEN) and engineered films (e.g. PET/SiO_x)

ZetaFill HC can be stored in a standard refrigerator (not in glove box) provided that the original packaging is not open, or it is sealed again in dry atmosphere.
Barrier bag should be opened in glove box (< 10 ppm H_2O) or in dry air atmosphere.
Opening in wet atmosphere should be avoided.
In the event of air exposure, ZetaFill HC nominal moisture capacity is not guaranteed.
Before use, ZetaFill HC must be left at room temperature for at least 2 hours. Otherwise, viscosity could result higher than the nominal value.

Ordering and Information

Please contact us at **getters_dispensers@saes-group.com**

SAES 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

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