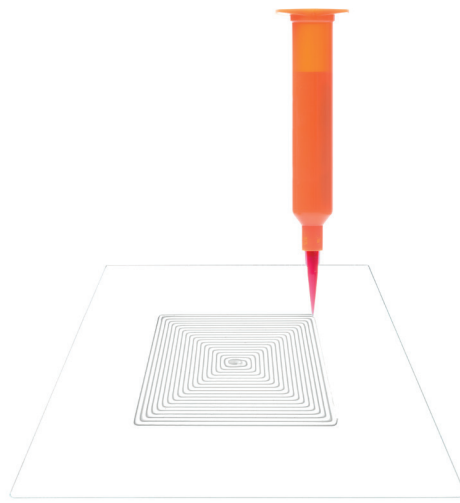


MicroDryer™ Plus

High Capacity and High Kinetics

Dispensable Dryer



HIGHLIGHTS

General Features

- Very high moisture sorption capacity
- Very fast sorption kinetics
- Ultra purified matrix
- Sticky film, without curing
- High flexibility
- Solvent-free
- Extremely low outgassing
- No loose particles

Applications

- OLED displays
- Semi-hermetic packaging
- Microelectronic devices
- Optoelectronic/Photonics devices
- Quartz crystal oscillators
- Implantable medical devices
- Flexible organic devices

Product Description

MicroDryer™ Plus is a high capacity, fast kinetics, solventless, matrix-purified dispensable dryer, designed for use in Electronics, Photonics and Organic Electronics applications. Due to its viscosity it can be applied by needle dispensing, blading, or slot die. MicroDryer Plus works as an irreversible moisture getter.

Material Property	Typical value
	Paste
Appearance	Whitish paste
Viscosity at 25°C (cP) (*)	165,000
Density (g/cm ³)	1.3
Nominal moisture capacity (%wt)	> 19
Moisture adsorption kinetics (%wt) 100 um thick film – 22°C/55%R.H.	> 12.8 after 2 h > 14.9 after 4 h
Decomposition temperature (°C)	> 300
Shelf life (months)**)	6
Pot life (RT, < 10 ppm H ₂ O) (days)	> 5
Storage atmosphere	Dry air or nitrogen
Storage temperature (°C)	2 to 8

(*) at a shear rate of 45 s⁻¹

(**) based on available data. Measurements are ongoing: estimated shelf life is 12 months

Processing

Bring MicroDryer Plus to room temperature before use.

Typical deposition techniques are needle dispensing, blading or slot die. Due to its fast moisture adsorption kinetics, dispensing is strongly recommended under Nitrogen or dry air.

Already tested compatible surfaces are:

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

Example of syringe dispensing parameters:

- Needle: 584 um
- Pressure: 40 psi
- Speed: 20 mm/s
- Dispense gap: 0.4 mm

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Curing is not needed for this product.

Cleaning

Typical solvents used for cleaning are acetone and hexamethyldisiloxane (HMDS).

Shipping and Storage

Shelf life of MicroDryer Plus is 6 months if properly stored (keeping the barrier bag sealed or the container in glove box).

MicroDryer Plus recommended storage temperature is between 2 °C and 8 °C.

Handling and Air Exposure

MicroDryer Plus exposure to ambient air should always be avoided, in order to prevent any loss of sorption capacity.

Ordering and Information

Please contact us at getters_dispensers@saes-group.com

MicroDryer™ Plus

High Capacity and High Kinetics Dispensable Dryer

The 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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The logo consists of the word "saes" in a white, lowercase, sans-serif font, centered within a solid red square.

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