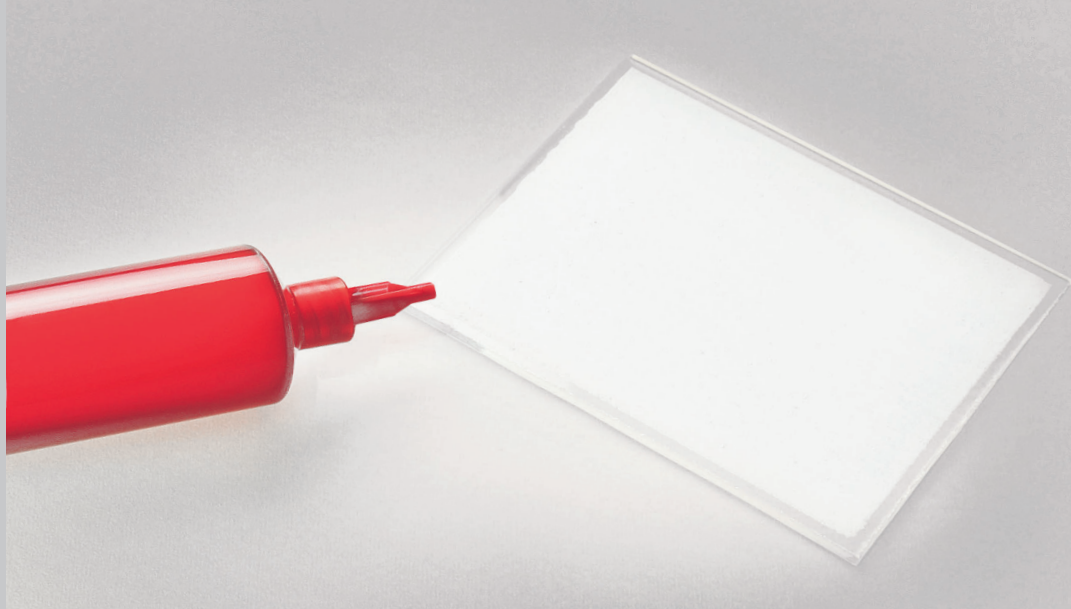


eDry™/W

Dispensable Dryer



HIGHLIGHTS

General Features

- Handling and dispensing in air
- High moisture sorption capacity
- Resistant to air exposure
- Rigid film after curing
- High flexibility
- Thickness range from 10 µm to 1000 µm
- Solvent-free, epoxy base
- Extremely low outgassing
- No loose particles

Applications

- Semi-hermetic packaging
- Microelectronic devices
- Optoelectronic devices
- Quartz crystal oscillators
- Implantable medical devices
- Organic lasers
- Flexible organic devices

Product Description

eDry™/W is a high capacity, solventless, thermally curable, dispensable dryer with low viscosity, designed for use in semiconductor, medical, microelectronic and optoelectronic packaging applications and other sophisticated applications. Due to its viscosity it can be applied by syringe or blading.

eDry/W films work as irreversible moisture getter.

Material Property	Paste	Cured film
Appearance	Grey	Grey
Viscosity at 20 - 30 s ⁻¹ (cP) (*)	47,000 (± 25%)	NA
Density (g/cm ³)	1.3	1.3
Moisture capacity (wt %)	> 16(**)	> 16(***)
Weight loss up to 200 °C (% wt)	< 1	< 1
Thermal Stability, max T(°C)	NA	300
Max. particle size (µm)	< 50	NA
Storage temperature (°C)	- 18	-30 to +170
Shelf life (months)	6	NA
Storage atmosphere	Dry if bag is opened	Dry

(*) at a shear rate of 45 s⁻¹

(**) guaranteed moisture capacity is 20% less of nominal one.

(***) only if the thermal curing step is performed under dry atmosphere

Processing

Bring eDry/W to room temperature before use.

Deposition

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

Compatible surfaces are:

- Glass
- Stainless Steel and other metals
- Plastics (PET, PEN, engineered films)

Example of syringe dispensing parameters are:

- Needle size 250 µm
- Pressure 3 bar
- Speed 8 mm/s



Thermal curing

- Curing conditions are 170 °C for 30' or 150 °C for 1h
- Curing can take place in air
- No solvent is evolved during curing.

eDry/W is a solid film after curing.

Moisture Sorption

eDry/W nominal sorption capacity is > 16 wt% at 25 °C, 55 %RH.

A negligible loss of capacity is caused by exposing eDry/W to air for 1 h before curing

Sorption Properties (typical)

Thickness (µm)	Sorption Capacity (mg cm ⁻²)
50	1
100	2
200	4

Cleaning

Typical solvent used for cleaning is acetone.

Ethanol can also be used.

Shipping and Storage

Short term storage: eDry/W exposure at room temperature (20-25 °C) over 72 h is not recommended.

Long term storage: shelf life of eDry/W is 6 months if properly stored (keeping the barrier bag sealed at -18°C).

Handling

Once the syringe is removed from the barrier bag, eDry/W must be deposited within 8 hours when exposed to ambient air.

After being cured, eDry/W films can be exposed to air (up to 16 h) without losing significant sorption capacity.

Ordering information

Code: 5X0813 Description:EDRY/W/SMT10 (Musashi syringe - 10 cc)

Code: 5X0815 Description:EDRY/W/SMT3 (Musashi syringe - 3 cc)

Code: 5X0817 Description:EDRY/W/SET3 (EFD syringe - 3cc)

Code: 5X0818 Description:EDRY/W/SET10 (EFD syringe - 10cc)

eDry™/W

Dispensable Dryer

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

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