



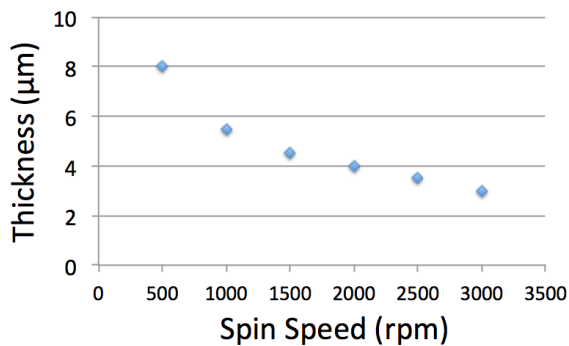
Z-COAT 211

Liquid Polyimide Coating

Z-COAT 211 is a spin on liquid polyimide coating on a carrier to support build-up of passivation/RDL and molding/encapsulation. Carrier later can be de-bonded with low-stress air jetting (AirDebond®). Z-Coat 211 is thermally stable up to 400 °C and resists most processing chemicals.

Z-COAT 211	
Appearance	Yellowish
Density	Solution: 1.04 g/ml; Solid: 1.43 g/cm ³
Viscosity	2000~2500 cps
Solvent	NMP/DMAC
Thermal	Stable to 400°C
Coating	Spin Coating or Stencil Printing
Package	Available in 1 liter or 1 gallon Bottle
Storage	Refrigerator Storage (< 4°C) Suggested

Spin Coating:



Recommended thickness is 5~8 µm (at 500 ~ 1000 rpm spin speed).

Hard Bake:

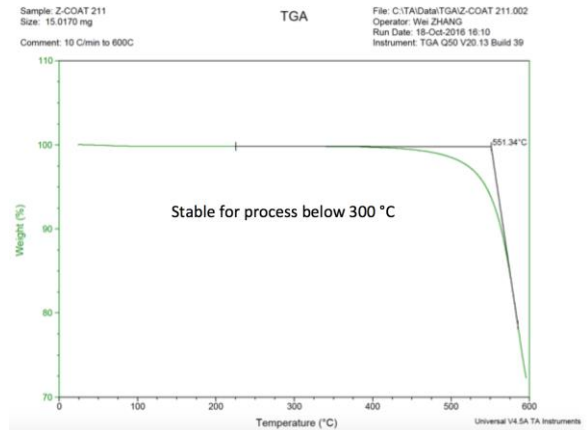
Thickness	Step Baking Schedule
< 10 µm	60 °C for 10 minutes + 250 °C for 5 minutes + 300 °C for 5 minutes

It is recommended to bake at low temperature (less than 100 °C) first to control initial solvent evaporation speed. Hard bake at > 300 °C may be needed for high-temp application.

Thermal Mechanical Properties:

- Thermosetting Polyimide
- CTE > 280 °C
- Flexural Strength > 300 M Pa

Z-Coat 211 TGA Analysis:



Decomposition Temp: > 520 °C
Weight Loss < 0.2% 2 hours at 300 °C

Z-COAT 211 Chemical Resistance TEST

Chemicals	TEST Conditions	Result
NMP	40 °C 60 minutes	Good/No Failure
2.38% TMAH	25 °C 30 minutes	Good/No Failure
DMAC	25 °C 60 minutes	Good/No Failure
DMSO	25 °C 60 minutes	Good/No Failure
Hydrofluoric Acid 6N	25 °C 30 minutes	Good/No Failure
Acetic Acid 6N	25 °C 60 minutes	Good/No Failure
AK 400 developer	25 °C 60 minutes	Good/No Failure
KOH 0.045%	25 °C 60 minutes	Good/No Failure
PGMEA	25 °C 60 minutes	Good/No Failure
Cyclopentanone	25 °C 60 minutes	Good/No Failure
Acetone	25 °C 60 minutes	Good/No Failure
Al Hydroxide	40 °C 60 minutes	Good/No Failure
10% Oxalic Solution	47 °C 60 minutes	Good/No Failure
Isopropanol	25 °C 60 minutes	Good/No Failure
H2O2: NH4OH	60 °C 60 minutes	Good/No Failure
H2O2 30%	25 °C 60 minutes	Good/No Failure
H2O (8) :H2SO4 (1): H2O2 (1)	25 °C 60 minutes	Good/No Failure

Failure Modes: 1) Thickness reduction; 2) Patterns; 3) Discoloration; 4) Film Crack; 5) Surface Sticky/Tacky

Cleaning:

Z-Coat 211 film residue can be peeled off.

Contact:

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