



Z-COAT 008

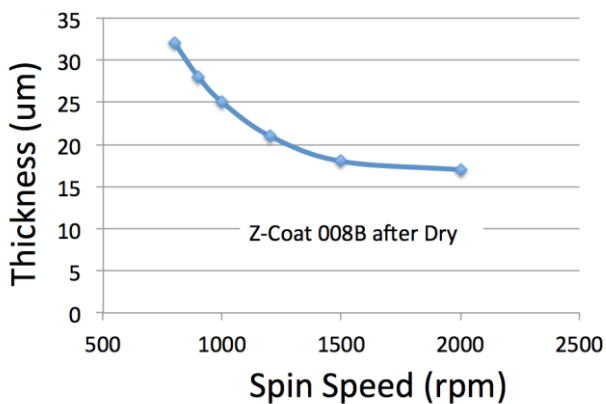
Wafer Temporary Bonding Adhesive (270 °C)

Z-Coat 008 is designed for wafer/panel temporary bonding to carrier for processing up to 270 °C. Z-Coat 008 can be applied by spin coating or stencil printing. After fabrication, thin wafer/panel can be debonded from its carrier with air jetting.

Basic Material Property

Z-COAT 008	
Appearance	Clear viscous
Viscosity	4000~5000 cps
Solvent	Yes
Thermal	Stable to 280°C, Optical Clear
Coating	Spin/Slit Coating
Package	Available in 1kg bottle
Storage	Room Temperature

Spin Coating



For typical wafer bonding application, the recommended thickness is > 18 μm.

Hard Bake:

Thickness	Recommended Dry Condition
15 ~ 20 μm	100 °C 5 minutes + 200°C 5 minutes
> 20 μm	60 °C 10 minutes + 200°C 10 minutes

Slower than 800 rpm spin speed coating is NOT recommended.

Other Properties:

Decomposition at 390 °C
Optically clear after 250 °C 30 minutes bake

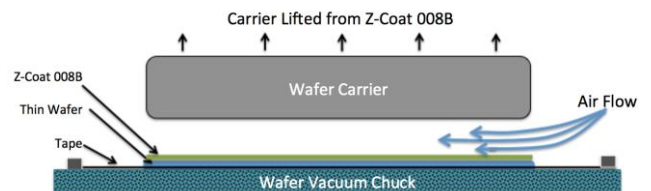
Bonding:

Temperature: 180 ~ 200 °C

Force: 100~400 kg

Vacuum: 10⁻⁴Pa

Debonding:



- Air streams between carrier and substrate;
- Air up-lift carrier from underneath;
- Air compressing wafer/substrate downward;

Chemical Resistance:

Dry Film 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 008 can be easily removed with Z-Clean 910 high pressure spray.

Contact:

Micro Materials Inc.
900 Calle Plano, Unit M&N
Camarillo, CA 93012
Tel: (805) 383-8810
Email: info@micromaterials-inc.com