

Product Application

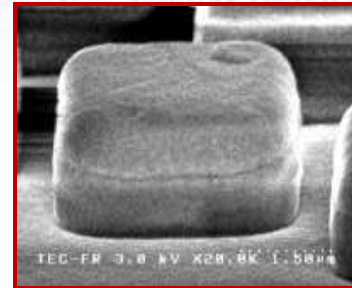
TechniStrip® P1331 is a highly effective negative and positive tone photoresist remover suitable for resin dissolution from BEOL to TSV mask and solder bumping applications.

Additional advantages of the TechniStrip® P1331 are its very high material compatibility, higher resin loading, bath life stability and low odor. The intrinsic nature of the additives and solvent make the blend totally compatible with metals used throughout the BEOL interconnects to WLP bumping applications.

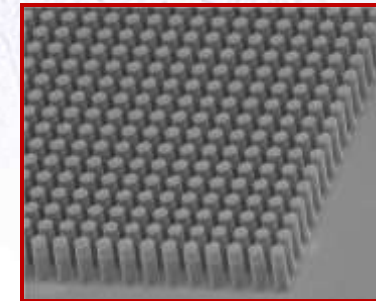
✓ Main features:

- very high stripping rate, >10µm/min
- great resin dissolution efficiency
- enhanced resin loading capacity, > 2 times to standard POR
 - THB121N, 21µm, 8" wafer- up to 15 wafers/liter
- Bath life up to 72 hours @ 70°C
- total metal compatibility, <10A/min @60°C
- complete water miscibility
- Safety: labeled irritant

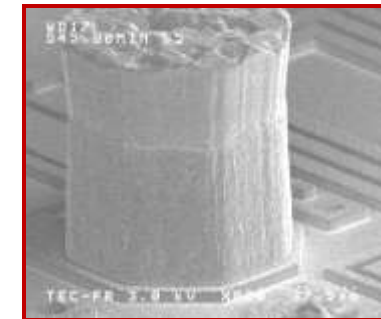
SEM Micrographs after TechniStrip® P1331 stripping in batch



After stripping polyimide on Al/Cu



Polyacrylate on Copper pillars



Bottom die with thin SnAg coverage with different Aspect ratios

General Process information-Stripping efficiency

Time to clear 65°C	Seconds
I Line positive (SPR...)	<600
D.U.V. 248 5.5 µm.	<300
Negative 1-120µm (THB...)	<500
Copper pillar and Sn/Ag bump 30-120µm	<600

Metal & Material compatibility

ER in A/min @ 65°C	Static Immersion
Al(5%Cu)	<10
Cu (PVD)	<10
Cu (ECD)	<10
Ni	<5
Ta/TaN	<3
Ti/TiN/TiW	<3
Au	<1
Thermal SiO ₂	<1
Undoped Si	<1

Materials:

Compatible: PP, PE (HD), PTFE, PFA, Chemraz®, Kalrez®, Simriz®, EPDM, PTFE

Not compatible: Polycarbonate, PEEK, Nylon, PES, PVDF, Viton®, Buna N, AFLAS, ECTFE (HALAR), PVC, CPVC

Bath life

To maintain optimal cleaning performance over 24Hr, it is recommended to work within closed systems (capped batch, spray tools, SWT). Due to the high thermal stability of the active ingredients, the bath life can be considerably extended compared to standard TMAH based stripping solution.

Quality

Technic' solutions are formulated using high purity and quality raw materials to ensure low ppb metal levels and particulate count. The full manufacturing process is in accordance with the company quality policy (ISO9001-2008).

Physico-Chemical properties

State: Uncolored to yellowish liquid

Viscosity (20°C): <2cP

Odor: very low odor VS TMAH blend .

Surface tension (20°C) :< 30 dyn/cm

T°C Flash point (Closed cup): 100,5°C

T°C boiling: 189°C

Water Solubility: Totally miscible

Impurity level: < 500ppb

Evaporation rate (open beaker) @ 65°C < 3 cc/hour*dm²

Health, Safety and Environment

To obtain comprehensive information on the safe use and handling of the TechniStrip® P1331, a material safety data sheet is available on request.

Technic' safety policy is to optimize and promote safer chemical to the industry in accordance to latest European regulation and Customer' chemical banned substance list.

Equipment

TechniStrip® P1331 can be used in batch immersion and batch spray equipments, as well as in single wafers cleaning tools due to its high stripping efficiency.

Contact

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