

TechniStrip™ NF52

Technical Data Sheet

### Product Application

TechniStrip<sup>™</sup> NF52 is a highly effective negative tone photoresist remover used mainly for TSV mask and solder bumping applications.

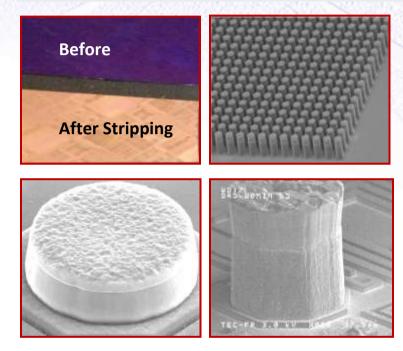
Developed to address laminated photo-resins and liquid resins, the novel cleaning formulation TMAH based showed high dissolution performance compared to standard TMAH based blends.

Additional advantages of the TechniStrip<sup>™</sup> NF52 are its very high material compatibility compared to standard TMAH based solutions. 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
- o great resin dissolution efficiency of dry film
- bath life up to 72 hours @ 70°C
- total metal compatibility, <2A/min @60°C</li>
- o complete water miscibility

SEM Micrographs after TechniStrip™ NF52 stripping in batch



Bottom die with thin SnAg coverage with different Aspect ratios

General Process information-Stripping efficiency

Time to clear 75°C	Seconds
Acrylic resin	<600
Laminated film /Dry film	1800



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#### Material compatibility

ER in A/min @ 70°C	Static Immersion
Al(5%Cu)	<1
Cu	<1
Ni	<1
Ta/TaN	<1
Ti/TiN	<1
TiW	<1
Au	<1
Thermal SiO2	<1
Undoped Si	<1

5				-
4,5		(A/min)		-
4		(A/min) (A/min)		-
2 3.5		re nine y		-
Ę 3	_			-
Etchrate (A/min)				
2 -	_			-
PH 1.5				-
1 -				_
0,5	_		_	_
0				
	50°C	60°C T°C (immersion	70°C	

Sheet resistance- 4 point prob measurements

# Physico-Chemical properties

State: Uncolored to yellowish liquid	
Odor: amine like	

T°C Flash point (Closed cup): 90°C

Impurity level: < 500ppb T°C boiling: 189°C

Viscosity (20°C): <2cP

Water Solubility: Totally miscible

# Equipment

TechniStrip<sup>™</sup> NF52 can be used in batch immersion and batch spray equipments.

Standard process: 65-85°C, 15-30min, direct water rinse.

#### Bath life

To maintain optimal cleaning performance over 24Hr, it is recommended to work within closed systems (capped batch, spray tools). 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).

# Health, Safety and Environment

To obtain comprehensive information on the safe use and handling of the TechniStrip<sup>™</sup> NF52, 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.

### Contact

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