

Product Application

TechniStrip® MLO-07 is a highly efficient positive & negative tone photoresist remover used for IR, III/V, MEMS, Photonic, TSV mask, solder bumping and hard disk stripping applications.

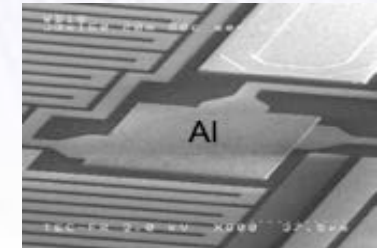
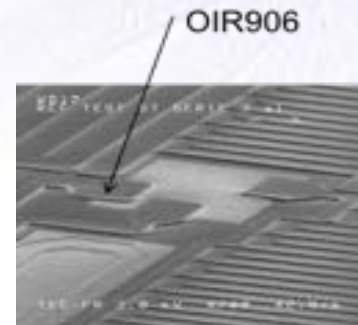
Developed to address high dissolution performance and high material compatibility on Cu, Al, Sn/Ag, Alumina, magnetic alloys, and organic substrates. i.e. PI, parylen, etc – Very efficient on gold metal lift off process.

TechniStrip MLO-07 advantages are its process versatility; longer bath life and safer alternative compared to standard TMAH based blends. The intrinsic nature of the additives and solvent make the blend totally compatible with metals used throughout the BEOL interconnects to WLP bumping applications.

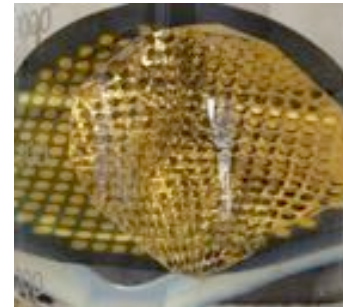
✓ Main features:

- Great NMP alternative
- very high stripping rate, >10µm/min
- Bath life up to 72 hours @65°C
- total metal compatibility, <2Å/min @60°C- may require intermediary rinse such as CO2/water rinse and/or water miscible solvents.
- complete water miscibility
- Qualified for the Dissolution of positive and negative tone resins: AZ4600, SPR220, AZ9000, AZ40WT series, OIR906 AZ Nlof...

SEM Micrographs after TechniStrip MLO-07 - stripping in batch



before and after positive resin stripping on aluminium pad



Metal lift off capability- limit the formation of metal fragment as observed with standard high pressure solvent approach

General Process Information-Stripping efficiency 65°C

Time to clear 65°C	Seconds
Positive resin dissolution	10mins
Metal lift off	10 mins
I line, DUV	10mins

Material compatibility

Substrate	Grade	COMPATIBILITY TechniStrip® MLO07					
65 °C	Immersion	AFLAS® TFE	B	PE (HD)	A	PVC	D
Al(5%Cu)	<2	Buna-N	D	PE (LD)	A	PVDF	D
Cu (PVD)	<2	Chemraz®	A	PEEK	B	P-styrene	B
Cu (ECD)	<2	ETFE	B	Poly carbonate	D	P-sulfone	D
Ni	<1	ECTFE	B	PMP	A	Silicone	B
Ta/TaN	<1	EPDM	A	PFA	A	Stainless steel 316i	A
Ti/TiN/TiW	<1	Halar	A	PP-Co	A	Teflon FEP	A
Au, Sn, Ag	<1	Kalrez	A	PP	A	Viton ETP & FKM	D
Thermal SiO2	<1	Nylon	A	PTFE	A		
Undoped Si	<1						

* 4points probe measurement on blanket wafers. Static immersion @80°C for 7days

** Spectroscopic ellipsometer on blanket wafers.

***Solution ICPMS after 48 hrs immersion

On request, additional materials can be tested for compatibility

Applications:

Compatible with organic substrates: parylen, PI...

Partially polymerized: Post ion mill, RIE

Substrats : Alumina Al₂O_x, AlTiC, Ta, Ru, SiC, Cu coil, etc.

Magnetic materials of NiFe, CoFe, & alloys, etc.

Physico-chemical properties

State: Uncolored to yellowish liquid

Odor: low odor

°C Flash point (Closed cup): 94°C

Impurity level: < 500ppb

Water Solubility: Totally miscible

Equipment

TechniStrip® MLO-07 can be used in batch immersion and batch spray equipments.

Bath life

To maintain optimal cleaning performance over 72Hr, 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 MLO-07, 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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