

## 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.

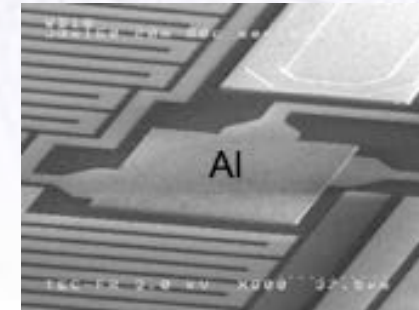
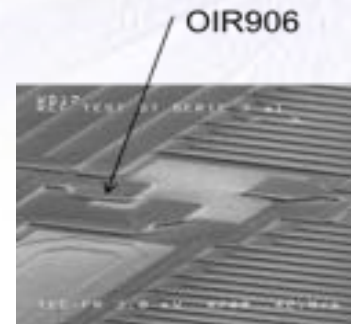
Developed to address high dissolution performance and high material compatibility on Cu, Al, Sn/Ag, Alumina, magnetic alloys, and organic substrates. i.e. PI, parylen, etc – Very efficient on gold metal lift off process.

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.

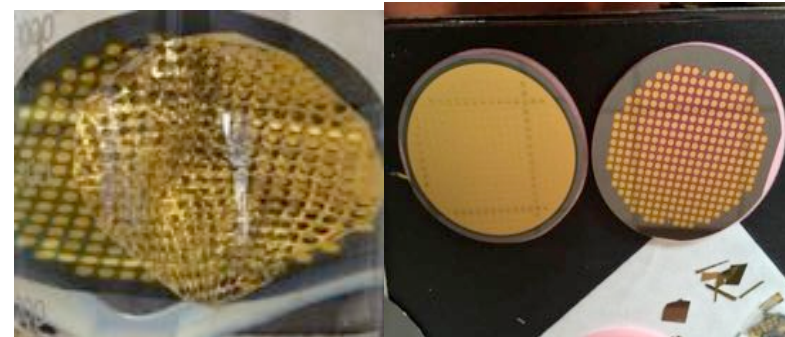
### ✓ Main features:

- very high stripping rate, >10µm/min
- Bath life up to 72 hours @65°C
- total metal compatibility, <2A/min @60°C- may require intermediary rinse such as CO2/water rinse and/or water miscible solvents.
- complete water miscibility
- Safety: Corrosive, TMAH & Fluoride, hydroxylamine free
- 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
Acrylic	<600
Capped novolac	<300
I line, DUV	<500

## Material compatibility

IE in Active @ 80°C	Static Immersion
Al(5%Cu)	<2
Cu (PVD)	<2
Cu (ECD)	<2
Ni	<1
Ta/TaN	<1
Ti/TiN/TiW	<1
Au, Sn, Ag	<1
Thermal SiO2	<1
Undoped Si	<1

COMPATIBILITY TechniStrip MLO-07			
PVC	No	EPDM	YES
Viton	No	PP	YES
PVDF	No	PE	No
HDPE	YES	Silicon	No
Teflon	YES	NBR	YES
PFA	YES	Stainless steel 316i	YES
PTFE	YES	Kalrez	YES
Halar/ECTFE	YES	PET	YES

\* 4points probe measurement on blanket wafers.

\*\* Spectroscopic ellipsometer on blanket wafers.

\*\*\*Solution ICPMS after 48 hrs immersion

On request, additional materials can be tested for compatibility

Static immersion @80°C for 7days

## Applications:

Compatible with organic substrates: parylen, PI...

Partially polymerized: Post ion mill, RIE

Substrats : Alumina Al2Ox, 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

T°C Flash point (Closed cup): 94°C

## Equipment

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

Viscosity (20°C): <2cP

Impurity level: < 500ppb

Water Solubility: Totally miscible

## 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 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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