

Product Application

TechniEtch AC35 is a highly effective & selective gold/copper stripper.

TechniEtc AC35 is an Iodine based Gold/copper etchant, containing particular additives that greatly enhance stability, wetting and metal loading capability compared to conventional I_2/I_3^- based solutions.

The key attribute of the TechniETch AC35 is its capability to address combined Au/Cu etching step while controlling the gold layer undercut to a minimum when etching very fast thick Cu layer.

Solution Main Features:

- Great Au/Cu etch selectivity
 - In use for Au(200nm/Cu 3µm) single etching step
- Low surface tension for enhanced wetting property.
- High stability even in presence of metal contamination (Cu, Ni...).
- Loading & bath life independent of the solution Cu contamination level (up to 1g/l).
- Enlarged loading capacity compared to standard I_2/KI based solutions.
- Better process controllability/reliability.

- Low Toxicity compared to cyanide and HF/HNO3 based solutions.

Material etch rate

Metal	static	Dynamic
Au	40	>100
Cu**	2-80	10-400
Ni	<1	<1
Al	<1	<1
Ti/TiN	<1	<1

Etch rates in nm/min @ 23°C

**Cu etch rate is process (static, spray, dynamic), stack materials and CuOx layer thickness dependent.

Physico-Chemical properties

- State: Liquid at room temperature.
- Color: Dark purple/ brown.
- Density: 1,14.
- pH: 6,2 à 7,4 @ 25°C.
- Miscible with water in all proportions.
- Boiling point: >100°C.
- Vapor pressure: < 1 (water = 1).

Additional information

- For use in batch and single wafer tool platforms
- The metal etch rate is mass transfer dependent
 - Dynamic dispense is needed to high etch rate
- No significant change in Au etch rate up to 1g of metal per liter of solution
- Bath life confirmed up to 5 days
 - Design for recirculation/reclaim tank.
- Water rinse
- Shelf life of 6 months minimum.

Material Incompatibility

- Material Construction: C-PVC, PP, PPS, ABS, Stainless Steel.
- Metal: Au, Cu, SnAu, Ag, Pd

Quality

Technic' solutions are formulated using most adopted purity and quality raw materials to ensure and respond to specific

customer's process specifications .e.g. metal level contamination, particle count, packaging...

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 Technic's solutions, a material safety data sheet is available on request.

Technic's 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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