TechniClean CA585

Highly Selective Post-Etch Residue Remover

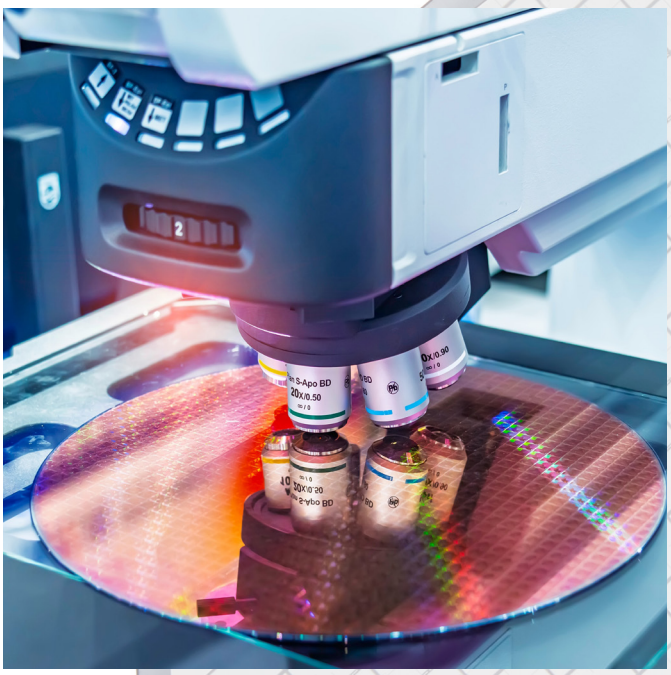
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PER Removal for AlCu, Cu, and W Structures

TechniClean CA585 is a semi-aqueous cleaner for fast, effective and selective removal of organo-metal oxides from Al, Cu and W, among others, after plasma etching and ashing.

This high-selectivity formulation dissolves etch polymers while leaving metallic structures, such as interconnect lines or pads, fully intact, and is particularly effective on halide post-etch residues.

Compared to legacy processes, TechniClean CA585 offers improved dissolution of fully organic materials, and its amine-, catechol- and fluoride-free, non-CMR composition reduces handling and compliance burden in the fab.



Benefits

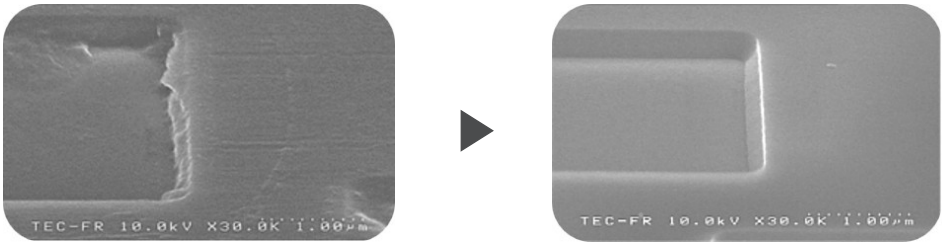
- Decreases EHS investment needs
- Lowers operational costs by eliminating IPA
- Reduces safety concerns and waste treatment
- Protects metallic lines with minimal etch attack
- Improves throughput with short process times
- Reduces energy consumption thanks to lower operating temperatures
- Secures supply with readily available raw materials, and is potentially recyclable

Features

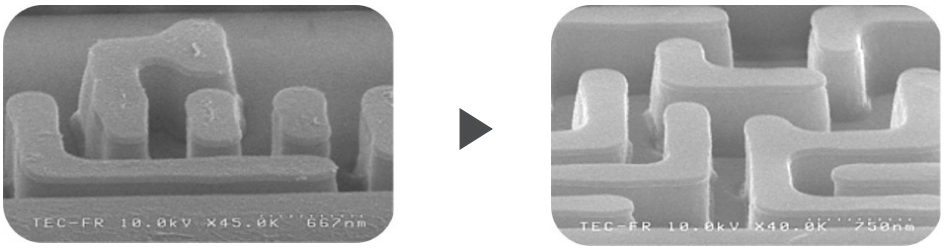
- High efficiency in removing all types of post-dry-etch residues
- Compatible with AlCu interconnects, Al pads and vias
- Suitable for backend AlCu, GaN, Ti, TiN and Ni structures
- Non-CMR chemistry

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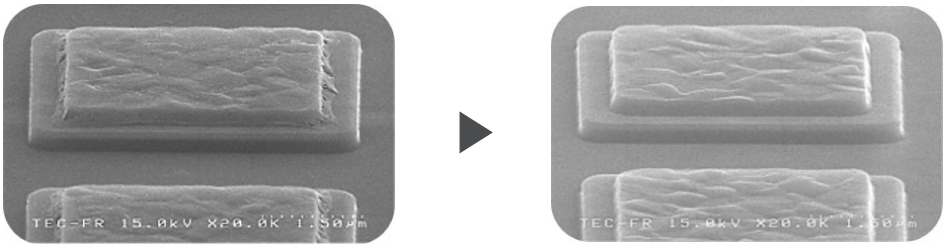
Full residue removal in backend and power device cleaning



Stack Power cleaning – 10 min 40°C.



Backend AlCu – Metal 1 Cleaning – 15 min 40°C.



Backend Cu – Bottom MIM Cleaning – 10 min 40°C.

As shown in the tests above, TechniClean CA585 delivers uniform, residue-free surfaces across different material stacks and feature sizes with no attack on metallic lines or surrounding dielectrics.

All processes shown ran at 40°C with a DI-water rinse only, no IPA or intermediate rinse steps.

Full compatibility data available on request.

For more information, contact us: info@technic.com

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