DuPont™ EKC4000™

Post Clean Treatment

**Product Description**

DuPont™ EKC4000™ post clean treatment (PCT) is a cost effective replacement that outperforms conventional “rinse” chemistries such as isopropanol alcohol (IPA) and N-methyl pyrrolidone (NMP). It quickly and effectively eliminates corrosion on the wafer surface caused by drag-out (carry over) of chemistry from prior wet cleaning. EKC4000™ PCT is compatible with automatic equipment and is formulated to meet Ultra Large Scale Integration (ULSI) grade specifications for advanced wafer treatment.

**Key Properties**

- Eliminates sources of corrosion
- Lower mobile and transition metal ions
- Ideal for <0.25 μm processing
- Eliminates SARA Title III chemistries
- Aqueous based, non-combustible and non-flammable
- pH of 4.2–4.4 removes mobile and transition metal “trash” ions from the surface
- Exceptionally high neutralization capacity
- Provides a route for repair of metal oxide damage
- Easy disposal via acid drains

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**Figure 1. Post Clean Treatment (PCT) Application Sequence**

- Plasma Etch
- Ash (optional)
- Wet Chemistry
- DuPont™ EKC4000™
- IPA
- NMP
- DI H₂O/CO₂

DuPont™ EKC4000™ post clean treatment replaces IPA and NMP as a rinsing agent
DuPont™ EKC4000™ post clean treatment is much less volatile than other rinses, such as isopropanol (IPA). This results in improved cost of ownership in addition to improved performance.

The pH of EKC4000™ enables the removal of metal ion contamination from the wafer surface.

1S. F. Cheah, PhD Dissertation