



## GENERAL

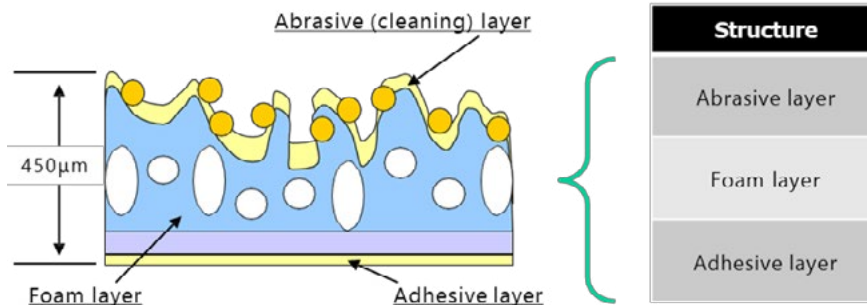
The presence of chlorine ions and chloride contamination on a bond pad surface can act as a catalyst for the copper (Cu) corrosion process and dramatically weaken the copper-aluminum (Cu-Al) intermetallic compounds (IMC). Reduced bond integrity can create long-term reliability issues for packaged devices.

LC10K (low-chlorine, abrasive foam) cleaning sheets were developed with chlorine levels of <100 ppm versus >800ppm of the SI10000-SWE (orange). The LC10K cleaning material has the same surface morphology / cross-section structure and matched material properties that define cleaning efficiency (i.e., hardness and wear rate). As with SI10000-SWE, the maximum operating temperature of the LC10K material is T = 80C.

To reduce the risk of chlorine contamination the LC10K (Low-Cl) material can be used as a direct replacement for the chlorinated SI10000-SWE for probe card cleaning applications

Material Property	LC10K (Low-Cl)	SI10000
Color	Green	Orange
Abrasive	#10000, Silicon-Oxide	#10000, Silicon-Oxide
Installed Thickness	~450um	~450um
Chlorine Content	< 100ppm	> 800ppm
Operating Temperature	0C to 80C	0C to 80C

## CROSS SECTION



	Cleaning Material Configuration			
	Sheet	200mm Wafer	300mm Wafer	Custom Install
<b>LC10K Layer Thickness</b>	450 µm (nominal)	450 µm (nominal)	450 µm (nominal)	450 µm (nominal)
<b>Support Carrier</b>		725 ± 20µm (SEMI Standard)	775 ± 20µm (SEMI Standard)	Contact ITS
<b>Total Installed Stack Height</b>	450 ± 100µm <sup>1</sup>	1175 ± 120µm <sup>1</sup>	1225 ± 120µm <sup>1</sup>	Contact ITS

1. Due to inherent lot-to-lot height variations associated with the abrasively coated foam, a certificate of inspection is provided with each material lot and should be used as the starting prober overtravel.

