

SMT Boards Need Lint-Free Sontara® for Quality Stencil Cleaning

For stencil cleaning rolls, Micro Care only uses DuPont first-quality hydroentangled “nonwoven” spunlace fabric, which is marketed under the brand-name of Sontara®. This paper is a blend of ultra-pure cellulose paper and an ultra-clean rayon/polyester fabric. The synthetic fabric provides great strength while the cellulose provides great absorption, which is why *Sontara was the paper originally specified by most of the stencil printer manufacturers*. When you use Micro Care rolls, you can be assured that only DuPont quality will be cleaning your stencils. Here’s what that quality brings:

1 – Lower Fiber & Particle Counts

The fabric will contain fewer broken fibers, resulting in less visible contamination 100µ or larger. The binders used in other nonwovens tend to abrade from the fabric, yielding higher particle counts in the 0.5µ range or higher.

2 – Less Ionic Contamination

Sontara does not release any sodium and chloride ionic contamination which could be redeposited on the stencil and boards. Fabrics not manufactured by DuPont may have higher extractables, often up to 1% of the weight of the sheet — nearly two grams per standard 450mm/18-inch stencil roll.

3 – Reduced Non-Volatile Residues

Binders often leave white residues. Sometimes these are misdiagnosed as problems with the solder paste or solvents. While not ionic, these residues are detrimental because they are highly visible, impair the effectiveness of conformal coatings and increase the rejection rates during QC inspection.

4 – Greater Durability

Once any binders are dissolved, the strength of the paper begins to deteriorate. Laboratory testing proves that Sontara papers are almost completely unaffected by electronics-grade solvents. Sontara wipes exhibit a tensile strength of up to 400N/90 lbs., depending upon the fabric, and will retain 75% of this strength even when wet.

5 – Wider Solvent Choice

To avoid dissolving the binders (see Item #4, above), many paper companies limit the solvent choices which may be used with their papers. Sontara products are compatible with nearly any type of electronics-grade solvent so process engineers have more options.

6 – Greater Consistency

Since there are no nonvolatile binders, chemicals, adhesives, or surface finishes added to the paper during the manufacturing process, the fabric is more consistent from lot to lot, and the wiping process will be more reliable.

7 – Greater Absorption

Binders fill the gaps between the fibers in the fabric, clogging spaces that would otherwise absorb solvents, solder paste and epoxies. Sontara fabrics lead the industry in purity, puffiness and softness.

8 – No Unexpected Reactions

Some papers use binders which are not miscible with the solvents in the solder paste. This will cause the solder paste to move away from the paper, rather than to be absorbed by it, and create a “solder-ball” effect during the cleaning process.

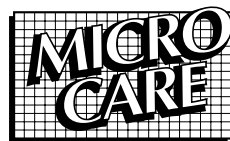
9 – Improved Hypoallergenic Properties

Lacking glues or binders, Sontara fabrics do not exhibit allergic or toxic responses when in contact with skin. In fact, the material is so clean it is used in hospital operating rooms.

10 – Greater ESD Protection

Unlike paper clogged with electrically-insulating binders and glues, in most modern manufacturing plants Sontara is slightly conductive and reinforces the ESD control program.

Sontara® Paper Is Used Exclusively in the Stencil Wiping Rolls Made by:



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