



Frequently Asked Questions

Q: How do I know if NanoClear® can be applied to my stencil?

A: NanoClear® is designed for use with metal stencils (including nickel and all grades of stainless steel). Generally the product is safe for metals and most polymers.

Q: How should I prepare my stencil for the NanoClear® treatment?

A: First remove large amounts of contaminants in a stencil washer or manually with solvent or 70/30 IPA/water blend and cleanroom wipes. The stencil should be visually 'clean' before applying the Part A chemistry.

Q: Can I use tap water?

A: Yes, but DI or Distilled is recommended.

Q: What are the characteristics of the NanoClear® treatment?

A: It is both hydrophobic and oleophobic which means that it will repel most materials, including flux and solder paste residues. This makes the surface both easier to clean and it stays clean longer. The treatment is less than 10 nanometers thick, which means there is no impact on the dimensions of the stencil apertures. Furthermore, it is chemically bound to the stencil surface, so there is no risk of the treatment coming off the surface and contaminating other downstream processes.

Q: Does the product contain any PFOA-related materials?

A: No.

Q: Is it possible to over-apply the NanoClear® Part A primer?

A: No, however we do suggest that you rinse off the primer before it dries (it would take almost an hour for it to completely dry), as dried-on material may need a little scrubbing with a wet (with water) cleanroom wipe before rinsing.

Q: Is it possible to over-apply the NanoClear® Part B treatment?

A: No, since the chemistry in the treatment only reacts with the surface oxides on the stencil it is inherently self-limiting and there is no risk of hard-to-remove excess coating buildup or polymerization products with this treatment. Any treatment that does dry on the surface can simply be removed with a little bit of alcohol (isopropanol) on a cleanroom wipe.

Q: Are there special handling considerations for a NanoClear® treated stencil?

A: No, the treatment is not fragile as it is chemically bound to the surface of the stencil. Treat the treated stencil as you normally would. Over time the treatment may slowly wear away as the stencil gets scratched, scuffed or otherwise damaged from normal use – if that occurs simply use another packet of NanoClear® and the treatment will be rejuvenated.

Q: What is the likelihood that the product can contaminate the machine/paste?

A: As long as you rinse off the Part A, then the Part B is so thin that it is not a cause for concern. If you are concerned then use an IPA / Water wipe to remove any residues.

Q: How do I know when to reapply the treatment?

A: It is difficult to give an exact lifetime as every manufacturer will use stencils in different environments. We recommend that you reapply the NanoClear® treatment when the benefits of rejuvenating the treatment are more desirable than the cost penalty for not reapplying the treatment (due to reducing yield and decreasing part/hr rates due to increased cleaning cycles/hr).

Q: Can the NanoClear® treated stencil be washed in my stencil washer?

A: Yes, Aculon NanoClear® is confirmed to be compatible with most stencil washers and neutral wash fluids. Avoid using caustic or other non-neutral stencil washing fluids with pH of 9 or above.

Q: Can I throw the used wipes in the trash?

A: Yes.

Q: Is it REACH compliant?

A: Yes, all materials are REACH compliant.

Q: What is the shelf life?

A: 1 year, if stored below 40 C.