

## ***Frequently Asked Questions***

### **Q: What is NanoSlic<sup>®</sup> Gold?**

**A:** NanoSlic<sup>®</sup> Gold is a polymer stencil coating designed to minimize underside cleaning and improve transfer efficiency.

### **Q: How does NanoSlic<sup>®</sup> Gold work?**

**A:** NanoSlic<sup>®</sup> Gold is applied to the aperture walls and underside of the stencil and provides a hydrophobic and oleophobic surface. This prevents solder paste from adhering to the stencil where this coating is applied. The benefits of this include reduced bridging, minimized underside cleaning, and improved solder paste release. Solder paste volumes are increased dramatically when NanoSlic<sup>®</sup> Gold is used.

### **Q: How does NanoSlic<sup>®</sup> Gold differ from other coatings in the market?**

**A:** NanoSlic<sup>®</sup> Gold is a thermally cured polymer which is thicker than conventional Nano-coatings. The most common Nano-coatings are wiped onto the stencil. The NanoSlic<sup>®</sup> Gold coating is several microns thick. It is a very durable and chemically resistant coating.

### **Q: Does NanoSlic<sup>®</sup> Gold affect stencil thickness? Aperture dimensions?**

**A:** The aperture length and width are reduced by the coating thickness, but the stencil thickness is increased by the

NanoSlic<sup>®</sup> Gold thickness. The net change in aperture volume is roughly 5% and is slightly dependent upon aperture size. NanoSlic<sup>®</sup> Gold does however increase the printed paste volume due to superior paste transfer efficiencies. This more than compensates for the slight reduction in aperture size.

### **Q: Will the NanoSlic<sup>®</sup> Gold coating come off?**

**A:** The coating has been designed to be a permanent part of the stencil. The stencil will likely be damaged and become unusable before the NanoSlic<sup>®</sup> Gold coating shows any signs of wear.

### **Q: Is the NanoSlic<sup>®</sup> Gold coating compatible with cleaning chemistries?**

**A:** Most cleaning chemistries are compatible with NanoSlic<sup>®</sup> Gold. However, higher pH (> 11) cleaning chemicals can damage the coating over time. A list of recommended cleaning chemicals is available in the TDS sheet.

### **Q: What happens if NanoSlic<sup>®</sup> Gold comes off in the printed paste?**

**A:** The coating is non-ionic and chemically inert, and becomes part of the flux residue around the solder joint. If water soluble solder paste is used, the coating would easily wash away with the flux. If no clean solder paste is used, then the coating becomes an inert part of the flux residue.

### **Q: Is the NanoSlic<sup>®</sup> Gold coating toxic?**

**A:** The coating is non-toxic, and is in compliance with RoHS, RoHS2, and REACH regulations.

### **Q: Is NanoSlic<sup>®</sup> Gold visible on the stencil?**

**A:** Yes, NanoSlic<sup>®</sup> Gold is easy to see on the stencil, so you know it is there and functional. The wipe on coatings are typically invisible, and consequently it is hard to tell when they quit working.

### **Q: If the NanoSlic<sup>®</sup> Gold coating is damaged, can it be re-applied?**

**A:** NanoSlic<sup>®</sup> Gold cannot be re-applied to a previously coated stencil.

### **Q: Can the NanoSlic<sup>®</sup> Gold coating be applied to a used production stencil?**

**A:** Yes, but the stencil must be completely cleaned of all solder paste residues.

### **Q: Does application of the NanoSlic<sup>®</sup> Gold coating change stencil lead time?**

**A:** Yes, NanoSlic<sup>®</sup> Gold coating increases the lead time by one day.

### **Q: What is the cost of the NanoSlic<sup>®</sup> Gold coating?**

**A:** See your local sales representative for details.