

## Foaming in Your Cleaning Process? Session Questions and Answers

**Q: Are there any soils that contribute to foam more than others?**

**A:** Typically, they are incoming raw materials or contaminants that can make it worse than others. Water-soluble fluxes tend to have a little bit more surfactant in them and that surfactant as it builds up in the tank tends to contribute to foam. Products that are made for water-soluble cleaning tend to address that problem well, but if for some reason you've made a switch and its not been built into that process or chemistry, it can contribute to foam a little more than typical flux.

**Q: My bath is cloudy, does that mean I should be concerned with foam?**

**A:** No, modern chemistries tend to use a cloud point surfactant which is a nonionic nonreactive surfactant. However, at temperature, typically 140°F maybe 120°F, they turn cloudy and it does that to help reduce the foam. The cloudiness of the bath is by no means an indication of whether you're going to have foam or do have foam. There are times that it can be a symptom of foam, but typically no.

**Q: You have told me how to prevent foam, what are my options if I've followed your steps for preventing foam and I still have it?**

**A:** A couple things: First, you can call KYZEN and we can come in and help through a process audit or look at the process and see if there's anything that we see as an outside set of eyes from a technical perspective. Should foam be an issue because of something that's incoming or trying to clean it off and is a persistent issue, we do have some defoamers. The key to that is there are a lot of defoamers out there. Some are silicon base which are not acceptable in electronics industry, but we do have good nonionic surfactants that will eliminate that in very low concentration, but my recommendation is to make sure that we're doing all the other things prior to getting to that point.