Processing Fodel® materials:

In addition to the typical thick film production equipment, processing Fodel® compositions properly requires the use of two additional pieces of equipment, a UV exposure unit (Hg or Hg/Xe lamp), and an aqueous conveyorized spray developer (to spray ~1% Na2CO3 solution). These equipment are common in the printed wiring board industry. Fodel® compositions are sensitive to UV light frequencies between 360 to 450 nm. Since Fodel® compositions are UV light sensitive, they must be handled and processed under yellow safe lighting conditions. See "Fodel Safe Lighting" pages.

Using standard stainless steel mesh printing screens, follow the data sheet recommendations and print the composition. Dry at 80°C. With artwork phototool pattern in place, expose the printed sample to UV light at the specified energy level. Then, "develop" the part by sending it through the spray developer & rinse. (Most spray developers include a DI water rinse module and air knife as part of the equipment.) See Fodel® Process Illustration below. Fodel® compositions are negative acting, meaning that areas exposed to UV light are polymerized or hardened, while unexposed areas remain soft or soluble in the developer solution. The dried developed part may now be inspected and fired using standard thick film furnace profiles.



Fodel® Process Illustration