

Sloshing Sealer Caution

Jim Doell (TX) - If you suspect that your aircraft fuel tank has ever been repaired using a sloshing sealer, do not fly until you verify that residue has not clogged the fuel screen.

I had cut an opening in the fuel tank above the sump to install a capacitance fuel probe. Much to my surprise, the screen over the hole to the sump was 80% closed with sloshing sealer. It was a thin residue, almost transparent.

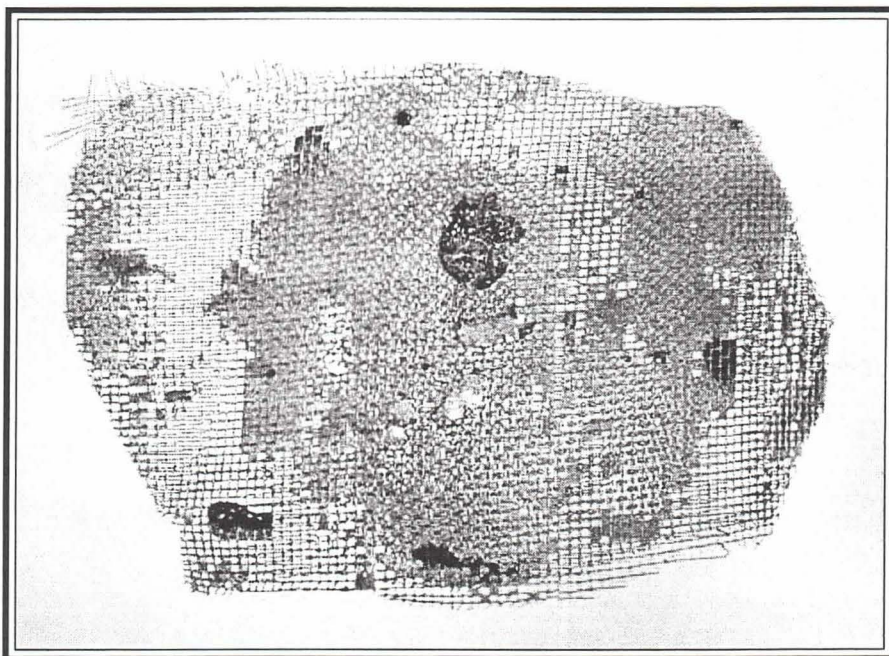
I previously suspected that someone used sloshing sealer due to the sticky residue on the tank bottom below the gas cap. It was only visible when the tank was dry.

Further investigation, using a boroscope, showed the forward section of the fuel tank to be where most of the sealer had accumulated. It was mostly concentrated in the drain valve area. After deciding it had to be removed, I cut an access hole in the forward tank section. I found that a previous repair had been attempted in the tank bottom using epoxy resin and cloth. The repair did not adhere to the surrounding structure because epoxy won't bond to the sloshing sealer.

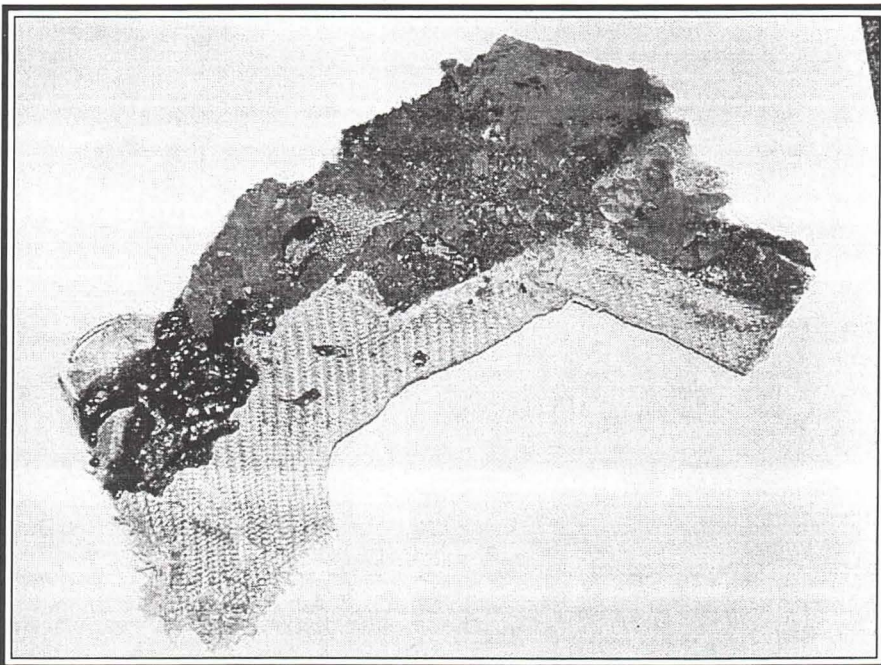
The old sloshing sealer was found in three different forms, a black tar like substance, very hard thick globes with a white surface and black center and the almost translucent very thin coating that was found covering the sump screen.

After a lot of scraping and sanding and some new wet lay ups, the tank is now ready to be re sealed.

If you suspect someone has ever put sloshing sealer into your aircraft's fuel tank, it is important to immediately check your sump screens. If you have chronic fuel tank leaks, I would recommend opening up your tanks and resealing with epoxy. It will take longer than using sloshing sealer but the results will be better.



Sloshing sealer debris



Poor quality attempted repairs are dangerous

