CASWELL
EUROPE

Remove Old Tank Seals, De Rust and Coating Metal Fuel Tanks

Whether you have a Car, Motorcycle, Tractor or Garden Machinery or any item that has a fuel tank that holds petrol, diesel or a derivative of these, you will know the problem of rust and its destroying nature. Modern fuels can also cause problems with fiberglass/composite tanks, as the resins are susceptible to attack by the chemicals put in to the modern lead free petrol that is sold nowadays

Fuel tanks made from steel are susceptible to rusting. In the past when leaded fuels were in use, the problem was greatly minimized. As unleaded petrol is now used for reasons of health and environmental safety, older vehicles and engines have to cope with it. The availability of leaded petrol has been vastly reduced all over all over Europe.

Unfortunately modern unleaded fuels with Ethanol, even with an oil mix for two stroke engines are aggressive to such an extent, that steel tanks can corrode even when full, and fiberglass resins will de-generate, allowing blisters to appear on the outside of the tank, that will eventually burst and cause leaks

Also it will break down in to a sticky varnish like substance that will enter the carburetor and stick up the slide action. This problem is compounded by the inclusion of MTBE (Methyl Tertiary Butyl Ether), which is being increasingly added to improve the anti-knock performance of the petrol, which lead previously, offered, and to enable the petrol to burn more cleanly.

The best preventative and remedial measure is to kill the active rust and then to apply a our GTS1750 2 part epoxy interior coating, which is designed specifically to be resistant to modern fuels and provide a corrosion free tank.

If the metal is suffering from corrosion the instructions below will show how to eliminate this corrosion completely

Removal of Old Tank Seal

For removing old, and Flaking tank sealers that are not ethanol proof, This product will remove sealers based on Novolac Epoxies, Amine Epoxies, such as POR 15 and Kreem, and also Polyester resins and paint from the inside of fuel tanks. The process is simple as you pour the Tank Seal Remover into the tank with some Plaster board screws, seal the filler cap opening and shake the tank in all directions. Continue until all old resin is dissolved and then empty out into a container and allow to evaporate off.
The tank should be left open for the vapours to leave the stripped unit. **"This product is not suitable for Fibreglass tanks"**

Dek Rusting

Mix 1 Litre of Rusty Metal Solution with 7 Litres of warm water (50°C), mix slowly for a few minutes and then add another 3 Litres of warm water, your mix is now ready to put in to the fuel tank.

Although not always necessary, we do recommend that you cover the tank in cling film, and make a hole were the filler is, this is just an extra insurance against spilling Rusty Metal Solution on paintwork, we have never seen it damage paintwork, but we do not know what your tank is painted with, and the condition of the paint

Pour the Rusty Metal Solution in the fuel tank, and leave it for at least 1 hour, agitating it frequently, checking the rust is removing, for heavy rust we recommend that you put some heavier objects such as dry wall nails in the mix, so that when agitating they will help to take of the rust, it is OK to leave the Rusty Metal Solution in the tank for up to 8 hours.

Empty the Rusty Metal Solution out of the fuel tank in to a suitable container, you can filter the rust from the Rusty Metal Solution Mix and use it again.

If the tank requires flushing, do not flush directly down the drain, dilute the waste with twice the amount of water and then allow it to go to the drain.

Ensure that tank is fully drained, and any loose particles are removed, and leave it to dry.

You are now ready to add the “Caswell Tank Sealer”

Applying Tank Sealer

Mixing ratio is *2* parts of A to 1 part B. Gas Tank Sealer resins should be at room temperature. Store your resin and gas tank at room temperature for 12-24 hours before mixing, so that it is at the correct temperature. Resin colder than 21°C will make resin thick and not flow well, hotter than 30°C will make it runny, so it doesn't stick to the sides well and it will cure too quickly. The tank and the resin should be at the same temperature. If the tank is hotter than the resin, it will cure the resin faster, reducing your working life and coverage. Resins stored in a garage that is 32°C, used at that temperature, would HALF the working time or worse. At 22°C, the material will have gelled in 30 minutes, so it is important to have wetted the tank walls with the sealer within 10k 15 mins of mixing.

Mix the sealer together until the epoxy is completed mixed
(approx. 2 minutes) (Coverage will depend entirely on the total surface area of the tank, not the volume)

Apply the sealer IMMEDIATELY after mixing completely. Waiting 5k 10 mins will reduce your working time and coverage rates, as the resin will have already started to cure.

In the event that the viscosity is too thick from working in higher temperatures which is inevitable, you can add a small amount of lacquer thinner to the mix (no more than 5% k i.e. 28ml in the motorcycle kit, 56ml in the car kit). This serves to retard the cure cycle and thin the sealer somewhat to allow easier coating coverage.

Cut the bag carefully and pour into the tank, then immediately seal up the filler hole with Cling Film and an elastic band.

Rotate the tank around in every direction for several minutes to obtain a good layer of Gas Tank Sealer over all surfaces.

Remove the filler cap, Cling Film seal, and pour out any excess. Allow to drain upside down for a few minutes.

If you have a built in fuel filter, blow air into the fuel line port for about 10 minutes. This will clear the filter of any Gas Tank Sealer.

Trim up any excess material as soon as the Gas Tank Sealer becomes plastic like. This can be scraped out with a sharp knife at this point (usually about 40-60 Min after mixing) Place the tank in a warm 22-32 ° C place and allow to cure for 24-36 hours before putting gasoline in the tank.

If you want, or need to apply a second coat, you must do so while the first coat is still tacky (usually within 24 hours)

If you can elevate the temperature of the tank to 60 ◊C for 4 hours, this will 'post cure' the resin and the tank may be put into immediate service.