De-rusting and Coating of Fuel Tanks

Fuel tanks made from steel are susceptible to rusting. In the past leaded fuels greatly minimised this problem. The introduction of unleaded petrol for health and environmental reasons and the policy of reducing the availability of leaded fuels means that many older vehicles and engines have to use modern unleaded fuels.

Unfortunately modern fuels, even with an oil mix for two stroke engines, are aggressive to such an extent, that steel tanks corrode even when full. This is caused by the added MTBE (methyl-tertiarymethyl-ether), which is being increasingly added to improve the anti knock performance of the petrol.

The best preventative and remedial measure is the special TAPOX 2-part interior coating which is designed specifically to be resistant to fuels with an ethanol content.

Always follow the steps for cleaning. If your tank is corroded you can choose whether to use the optional Step 1 (Fedox Rust Remover) or go straight to Step 2 (Fertan Rust Converter).

You must always use Step 2, Fertan Rust Converter, before applying Tapox.

Do not use any of these products on glassfibre or carbon fibre tanks.

Cleaning

Rinse the tank with water then pour 50cc of washing up liquid into the tank with a litre of warm water. Leave this solution in the tank for about an hour, shake thoroughly and frequently to clean all inside surfaces.

Empty the tank and put in about 1/2 litre of an alkaline engine cleaner. **Don't use** mineral based products. Petrol, acetone, thinners or degreasing agent are also unsuitable.

Shake thoroughly and frequently to dissolve any remaining oil and petrol within the tank. Leave cleaner to work for at least 1 hour agitating frequently and then empty the tank.

Thoroughly flush the tank with water and then open all connectors, for complete drainage.

De-Rusting and corrosion protection Step 1

This step is optional, but recommended.

You need to decide if you are going to use FEDOX to remove all the internal corrosion or go straight to Step 2. It is worth considering that if you remove all the rust you may create small perforations or seam seepage that should be soldered or brazed.

Complete rust removal with FEDOX.

Put 1 litre of FEDOX and 9 litres of 60°C warm water into the tank. Periodically turn and leave the tank in different positions so that all surfaces spend time in the liquid. Keep the tank at 20°C for at least 12 hours

Then drain and rinse the tank thoroughly with clean water.

TAPOX TANK SEALER

for steel tanks

De-rusting and Coating steel Fuel Tanks

Congratulations, you've bought a coating set that will protect your tank against future corrosion and maintain its value. Please read the instructions

and technical information carefully

before starting and then follow the instructions for

a perfect result.

FERTAN® GmbH DEUTSCHLAND FERTAN® U.K.

TAPOX Protection

De-rusting and corrosion protection Step 2

You must carry out this stage of treatment for your tank to enjoy long term protection.

Pour **FERTAN** Rust Converter into the tank which should still be damp from the final rinse. Use about 0.25 litre for a 10-12 litre tank volume, 1 litre in a 40-50 litre tank.

Ensure all opening are closed and then turn and shake the tank with the **FERTAN** Rust Converter inside to ensure that all areas are wetted out. Now drain the tank, open all openings and leave it for at least 24 hours at 20°C.

The drained FERTAN can be used on other jobs.

After the 24 hour reaction time rinse the tank thoroughly until there are no particles in the water. If necessary check for particles by running the draining water through a white coffee filter.

The tank is now rust free. It **must** be completely dry before applying the Tapox. So either leave it in a warm place and/or blow warm air through it.

Although these processes can seem labour intensive and time consuming, they do ensure that the tank is completely rust free and avoid the unnecessary removal of material and weakening that happens with blasting.

Now, you are ready to use the fuel resistant 2-part coating. If you have followed the steps correctly the Tapox is going into an absolutely rust-free steel tank and will reliably prevent any future corrosion.

One Tapox will treat all motorcycle tanks and car tanks up to 50 litres. Later in his process it will be necessary to ensure ventilation after coating the inside of the tank. Only a very gentle supply of air is required (approx. 0.2—0.4 bar max.) preferably from a compressor, thought only a small air supply is required. The constant air movement will accelerate the drying process in the tank itself. Moving air removes the solvent quickly and prevents the coating moving inside the tank before it dries.

The solvent is volatile as so it is important to stress that this air supply must not come from an electrical appliance, as the evaporating solvent could catch fire. Keep away from open flames - No smoking and ensure good ventilation!

We recommend using a paint stirrer in a speed controllable electric drill to ensure thorough mixing. Use a low speed to avoid splashing!

Open the can TAPOX (component 1). For the first week or so after manufacture you would see red resin and a small amount of liquid. After a few days this liquid is absorbed by the resin. With the lid removed think about drilling a hole in it for the shaft of a paint stirrer. Now open the TX 10 (component 2) and tip the contents into the TAPOX container. Mix the two products to make a thin, lump-free liquid. This is likely to require 1-2 minutes with a drill or a long time by hand.

TAPOX IS FOR USE ONLY IN STEEL TANKS.

Ensure all tank opening are closed. Use bolts rather than fuel taps etc. or these will get coated. Tip the **TAPOX** solution into the tank through the fuel filler. Close the fuel filler with plastic beneath so the cap doesn't get coated.

Turn and shake the tank in all positions and angles so all interior surfaces are coated. 3 - 5 minutes.

Now open the petrol cap petrol drain hole and then the fuel filler to drain the tank of excess **TAPOX** back into the mixing container. Please ensure that all excess is properly drained off. Any splashes that have occurred on the exterior paint **must** be immediately wiped off with thinner (Nitro-/universal-thinner).

Turn tank so that the largest opening, normally the filler neck, is facing downwards and leave it to dry for 30 - 60 minutes.

Leaving the tank upside down with the filler at the lowest point you must, as described earlier, start a gentle constant air flow through the drainage opening into the tank for a minimum of 180 minutes so that all solvent residue is expelled. The solvent vapours are heavier than air and need to leave the tank so the epoxy can dry. This air supply process is mandatory as the resins in the tank sealer will not dry properly without it.

It is really important that the air passing through the tank has low pressure, a maximum of 0.2—0.4 bar otherwise the internal coating, still soft at this stage, could be damaged. We use either a very restricted flow from a compressor or an airbed inflator from the Tesco 'cheap and cheerful' range.

Remember that the solvent vapours are volatile so: good ventilation, no smoking, no sparks and no sucking the air out with a vacuum cleaner.

Finally, leave the tank to harden off for a minimum of 120 hours (5 days) at a temperature of 20 degrees C.

The excess Tapox that was drained from tank can be used at once for any other coating jobs. It makes a particularly effective coating for battery trays or other similar purposes. If necessary it can be stored at between 1 and 4 degrees Celsius (in a fridge for example) for max. 12 hours.

Any further questions please email or telephone.

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