

Gold Standard Tank Sealer is a superior, single component, ready-to-use sealer specifically formulated for coating the inside of new or repairable steel, aluminum & fiberglass tanks. Widely recommended & very easy-to-use, this single coat application cures into a tough fuel impervious seal and prevents the return of rust, corrosion and clogged carburetors. This rock hard interior seal remains flexible enough to withstand vibration as well as the repeated expansion & contraction of the tank! Tank Sealer is unique in that it will penetrate and galvanize itself to the tank walls forming a moisture proof barrier.

Use Tank Sealer in conjunction with KBS Klean (a water-based, heavy-duty, cleaner/degreaser) and RustBlast (a powerful phosphoric acid metal etch/rust remover) to obtain a permanently sealed, rust-free tank.

ALWAYS WEAR PROTECTIVE GLOVES AND SAFETY GLASSES. ALWAYS WORK IN A WELL-VENTILATED AREA. Please heed all warnings and caution notices.

To achieve expert results, please take the time to carefully read and understand the following directions before you begin your tank sealing project. Ideal Tank Sealer application temperatures are 55°-82°F. Always allow KBS products and the articles to be treated to adjust to room temperature. Tank Sealer is a moisture-cured urethane therefore use only in moderate to dry atmospheric conditions. Avoid sealing tank in rainy or humid conditions. If the Tank Sealer cures too quickly, surface bubbling will occur as a direct result of gas entrapment beneath the top surface layer of the Tank Sealer. Tank Sealer may be used to seal gas, diesel & bio-diesel fuel tanks, oil tanks and non potable water tanks. If you are sealing a fiberglass tank, please refer to additional instructions provided.

#### FOR BEST RESULTS, PLEASE BE PATIENT DURING EACH STEP OF THE PROCEDURE. DO NOT RUSH!

### **IMPORTANCE OF TANK PREPARATION:**

Alltanks, whetherold or new, have oils, gum & varnish residues or other contaminants that require thorough removal before sealing. The KBS 3-Step System is a specific process formulated to ensure superior adhesion of the coating & its long-term performance. Sealing a tank without proper prep will cause any new coating to fail. *If a tank was previously sealed, you must remove the old coating first with KBS Strip then proceed using the KBS 3-Step Tank Sealer System.* Please refer to additional Tank Stripping instructions provided further below.

### **STEP #1 - KBS KLEAN - CLEANING TANK:**

- Drain fuel from tank. Proper fuel tank sealing also requires that the tank be removed from the vehicle. Remove any fittings such as floats, sending units and filters.
- Seal all openings with high quality duct tape, pieces of rubber covering the hole secured by high quality duct tape, or cork-like stoppers secured by high quality duct tape.
- 3. Using a 1:1 dilution ratio, mix KBS Klean with hot water and pour mixture into tank. Let tank soak but always rotate it at intervals to ensure KBS Klean covers all surfaces. (**NOTE:** Heavy gum and varnish build-up may require extended soaking times up to 24 hours or more and/or the use of a pressure washer. Placing some nuts & bolts or loose chains inside the tank, along with frequent aggressive shaking and rotation, will help knock away loose rust and contaminants.)
- 4. Empty tank capturing the KBS Klean, strain the KBS Klean solution, and <u>repeat as often as necessary</u>. Remember the cleaner the tank, the stronger the adhesion of the Tank Sealer. <u>NOTE:</u> If you had any loose, flaky rust, it should be removed at this point. If not, repeat until all loose, flaky rust is removed.

## 5. After a thorough cleaning, rinse generously with water until the solution runs clear. Drain tank and let dry.

TIP: Your tank can not be too clean. Please spend the time required on this step.

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#### <u> STEP #2 - RUSTBLAST - SURFACE ETCHING / RUST REMOVAL:</u>

- Pour entire amount of <u>FULL STRENGTH</u> RustBlast into a dry tank. Do not dilute. Continually roll tank around to ensure all interior surfaces are kept wet. Repeat rolling and tipping tank every 5 minutes for a <u>minimum</u> of 30 minutes to 1 hour. RustBlast is an acid metal etch that will neutralize existing rust & also create an anchor pattern ideal for Tank Sealer adhesion.
- 2. Important: Do not allow RustBlast to dry on surface. This avoids too heavy of a zinc phosphate buildup which can adversely affect the sealing process. After sufficient wet contact, drain & capture RustBlast in a bucket/container. Repeat process as needed. Once thoroughly etched, drain and rinse tank thoroughly several times with water. (NOTE: It is not necessary to remove every last bit of surface rust before sealing. Gold Standard Tank Sealer is very capable of bonding to & permanently sealing any remaining surface rust or corrosion.)
- **3.** <u>IMPORTANT</u>: After rinsing, allow tank to <u>DRY COMPLETELY</u> before proceeding. Drying is best accomplished by introducing forced air into the tank by using a shop vac, blow dryer, or fan. A white powdery residue and some slight surface rust may appear after drying. This is the zinc phosphate coating advantageous for Sealer adhesion. (*NOTE: Drying is a critical step. If the tank is not completely dry, the Sealer will not adhere properly.)*
- 4. After a good cleaning & prep and depending on the condition of the tank, any existing pinholes could become larger and/or some new holes may appear in your tank. If these holes are indeed larger than a head of a pin, now is the time to repair them with NuMetal Epoxy Putty. (See more info below.)

#### IMPORTANT: ALLOW TANK TO COOL TO ROOM TEMPERATURE BEFORE PROCEEDING. DO NOT ATTEMPT TO SEAL WHILE TANK IS IN DIRECT SUNLIGHT.

### STEP #3 - GOLD STANDARD TANK SEALER - SEALING TANK:

- It is recommended to seal your tank within 10 days of cleaning & prepping it. When ready, open Sealer and stir can thoroughly. Touch bottom & lift when stirring to raise & disperse any settled silver pigment. DO NOT WHIP OR SHAKE can as this will introduce air, create bubbles in the Sealer and adversely affect the sealing process.
- 2. Carefully pour entire contents of can into tank and slowly rotate and roll tank until all sides are evenly coated. <u>Patiently</u> work with sealer for up to 30 minutes. Please note that our Tank Sealer is formulated for use as a single thin coat application so make sure you take the time to thoroughly coat the entire tank extremely well paying particular attention to leaky weld seams & pinholes for optimal coverage & seal.
- 3. <u>IMPORTANT</u>: After a thorough coating inside of tank, patiently DRAIN ALL EXCESS SEALER from tank until it no longer drips sealer. Additionally, to avoid puddling and pooling of excess sealer inside the tank, <u>rotate the tank side to side every 5 minutes</u>. If the design of the tank makes complete draining difficult, rotate the tank frequently into different positions during this time to help minimize excess accumulation in any single area. Foaming & bubbling are signs of excessive Sealer accumulation and gas entrapment due to ineffective drainage. In some cases, this may cause the Sealer

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to not adhere properly and eventually break loose. Be aware that if this situation should occur, the only recourse is to strip the tank and repeat the process.

- Immediately use any left-over Sealer for exterior painting and patching to reinforce repair of pinholes & weld seams. (see further patching info below)
- 5. Immediately remove any excess Sealer from threads and fuel lines before curing. Cured Sealer cannot be removed by any solvent. When job is complete, place drained Sealer in can with lid off and let harden. Drained Sealer cannot be saved & re-used as it has been exposed to atmospheric conditions and will cure & harden in the can. (WARNING: Do not put lid on can before curing is complete as pressure may build within can and pop lid. Dispose of any hardened Sealer properly in accordance with federal, state, and local regulations.)
- 6. Allow tank to air-dry naturally in a well-ventilated area. IMPORTANT: DO NOT PLACE TANK IN DIRECT SUN OR NEAR DIRECT HEAT. Heating the tank will not allow sealer to cure quicker and may in fact hinder adhesion. Allow <u>96 hours</u> for maximum cure. Always test for leaks by filling with water before re-filling with fuel.

#### EXTERIOR PATCHING: (if necessary)

Use KBS BackBone Reinforcing Mesh for exterior repair of pinholes or weld seams. Prior to patching, prep the *outside and inside* of the tank by using KBS Klean and RustBlast and allow all surfaces to <u>dry completely</u>. Begin by sealing the inside of the tank as outlined above. After sealing, immediately use any remaining Sealer to paint a thin layer on the exterior pinhole area(s). Using a suitably sized piece of BackBone Mesh, embed it directly into the wet Sealer and apply another thin coat of Sealer painting outward from the center. Let cure.

**For exterior patching of holes that are larger than pinholes**, use KBS NuMetal Epoxy Putty. Clean & prep the inside and outside of the tank using KBS Klean & RustBlast as stated above. Let dry. Scuff up area to be patched with 320 grit sandpaper then follow NuMetal application instructions. (*NOTE: Allow NuMetal to cure for <u>12 hours</u> before proceeding with sealing the inside of the tank.)* After sealing & draining the inside of the tank, immediately use any remaining Sealer to paint a thin coating on the exterior patched area for reinforced coverage.

#### **CLEAN UP:**

Use KBS #1 Thinner for **immediate** clean up. **IMPORTANT:** Tank Sealer must be cleaned up before it dries as it cannot be removed by any solvent once cured. Always wear protective gloves to avoid skin contact and temporary staining. If skin contact accidentally occurs, immediately remove with #1 Thinner or lacquer thinner followed by soap and water. If Tank Sealer should stain your skin, only the course of time will remove it.

#### STRIPPING TANKS: (if necessary)

Use **KBS Strip** for the most effective removal of an old failed coating. **KBS Strip** is designed to work effectively when the ambient AND tank surface temperatures are between 60-85F. However, KBS Strip is <u>MOST</u> <u>EFFECTIVE</u> when the ambient and surface temperatures are above 70F. Said in Another Way: The Warmer, The Better!

Pour some **KBS Strip** into tank and carefully rotate tank to allow contact with all sides. It may take multiple applications of **KBS Strip** to finish the job completely. If an area needs extra attention, prop the tank so that the excess collects on that area. Continue until the majority of the remaining sealer is loosened and/or removed. Old Sealer may come loose in big chunks or small pieces so use a long tweezers-type tool to help remove it from the tank.

After **KBS Strip** has been allowed to work, pour out **KBS Strip**, capture, and strain into an appropriate metal container for possible reuse. *Reuse the KBS Strip as many times as needed to remove the old liner in the tank.* 

Rinse tank thoroughly with water. If any part of the sealer still remains, repeat Tank Stripping steps until old sealant is removed.

After stripping is complete, rinse tank generously with water and proceed with the **KBS 3-Step System** for Tank Preparation and Sealing. (NOTE: When stripping a Fiberglass Tank, surface contact with the stripping agent should be kept to a minimum to avoid the attack and weakening of the fiberglass resin.)

<u>NOTE</u>: Extra care needs to be taken when using **KBS Strip** to avoid contact with exterior paint of a tank. **KBS Strip** is a powerful paint remover and WILL INDEED remove exterior paint on gas tanks.

### FIBERGLASS/CARBON FIBER TANKS:

The procedure for sealing Fiberglass Type Tanks is the same except for a variance in **Step #2 - RustBlast**. For this type of tank, thoroughly wet the surface for **roughly 2 minutes** using RustBlast. Drain and rinse well with water as directed. Because you are not prepping metal or dissolving rust, RustBlast may be saved and re-used for future use. RustBlast will, however, treat the surface by giving it a more acidic pH level & by leaving a zinc phosphate coating ideal for Tank Sealer adhesion.

Also, it is important to make sure that the tank is **<u>COMPLETELY DRY</u> <u>INSIDE</u>** before sealing. Drying is best accomplished by introducing forced air into the tank by using a shop vac, blow dryer, or fan.

(NOTE: Drying is a critical step for sealing fiberglass tanks. Fiberglass tends to hold moisture and if the tank is not dried completely, the Tank Sealer may not adhere properly.)

**IMPORTANT:** It is also very critical to methodically coat the entire fiberglass tank completely & thoroughly with the Tank Sealer. If any part of the fiberglass surface should accidentally be left exposed or unsealed, however, these unprotected areas will be very susceptible to deterioration by alcohol blended fuels and it is therefore *highly recommended that these fuels not be used in fiberglass tanks even after sealing.* After coating the tank, remember to drain well to avoid pooling and puddles.

#### **QUESTIONS & TIPS:**

# $\widehat{\mathbf{Q}}$ . What's the best way to prevent the Sealer from getting on the screw threads?

A. Apply a small amount of oil (WD-40 or similar) to the threads, and if the Sealer dries on those threads, it will peel right off.

**Q.** What's the best way to remove the Sealer from the fairly small "L" shaped protrusions on the underside of each side of the tank? A. If you can't get to it from the inside, use pipe cleaners or cotton swabs to remove the Sealer from these tubes before it cures.

#### Q. Any other tips, "tricks of the trade", suggestions, etc.?

A. Just remember to be sure the tank is <u>completely dry</u> before using the Sealer. Apply a thin film of oil wherever you don't want the Sealer to stick. Do not allow the Sealer to "puddle" in the tank. If the tank has baffles or a design which does not allow for complete draining of the excess Sealer, keep rotating the tank (every 10 min or so) as the Sealer cures to help prevent pooling & puddles.

Sprayable VOC's (Using KBS #1 Thinner): <200g/I PLEASE SEE SDS AND FOLLOW ALL WARNING AND CAUTIONS.

# MADE IN THE USA.

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