



# RUSTSEAL

## TDS/DIRECTIONS & APPLICATION INFORMATION



*RustSeal is a single-component, ready-to-use, high-solids content, moisture-cured urethane with exceptional sealing properties. This premium coating is specifically formulated to prevent or encapsulate any existing rust and provide a permanent seal against entry of moisture. RustSeal is a non-porous & flexible coating that is incredibly tough & extremely resistant to abrasion, impact and vibration. RustSeal is also highly surface tolerant and capable of adhering to almost any prepared substrate such as steel, aluminum, fiberglass, concrete, wood, Styrofoam & some plastics.*

To achieve expert results, please take the time to carefully read and understand the following directions before you begin your restoration project. These directions are meant to be general guidelines only and do not cover every application or environmental situation. If you have remaining questions or concerns, please call us at 219-263-0073 for technical assistance.

**ALWAYS WEAR PROTECTIVE GLOVES AND SAFETY GLASSES. ALWAYS WORK IN A WELL-VENTILATED AREA. Please heed all warning and caution notices on all KBS products.**

### IMPORTANCE OF SURFACE PREPARATION:

Despite what others may lead you to believe, it does not matter how good the rust prevention product is if the surface is not prepared properly. Corrosion and organic contamination will block and inhibit any coating from deeply penetrating and permanently adhering to the surface. Even new metals have protective surface oils applied that will interfere with adhesion. Simply put...the cleaner the surface using KBS Klean, the more effective RustBlast will work and the deeper RustSeal will penetrate into the pores and permanently seal and protect the surface.

Apply RustSeal to clean dry bare surfaces with good porous surface profiles such as tightly rusted, sandblasted, or other abraded surfaces to which RustSeal can "bite" into.

**SANDBLASTED SURFACES:** Newly sandblasted (fresh and not recycled sand) metal surfaces that have been handled with gloved hands are the ideal choice for direct RustSeal applications as they require no preparation other than blowing off loose dust (Proceed to Step #3). Remember to always wear gloves when handling sandblasted items to avoid contaminating the surface with oily fingerprints.

**Please Note:** Plastic media, bead or soda-blasted surfaces do not provide the adequate amount of abrasion needed for direct RustSeal application and do require Step #2 RustBlast for further etching.

For all other applications, simply follow the simple KBS 3-Step System below. Always allow products & surfaces to adjust to room temperature before prepping & painting.

### STEP #1 - KBS KLEAN - CLEANING SURFACE:

After removal of any loose flaky rust by sanding using 320 grit sandpaper, wire brushing and/or wire wheeling to achieve a solid surface profile, it is necessary to remove all surface contamination. Slight residues of grease, oil or even fingerprints can ruin any good paint job. Avoid using any solvent based cleaners which leave residues. Begin by diluting the KBS Klean concentrate with water. The warmer the water, the more effective and powerful the cleaning action of KBS Klean will be. Effective dilution rates will vary according to the type and degree of contaminants as well as surface materials. KBS Klean may be used in power washing equipment. For general purpose cleaning, apply liberally and scrub surface for 5-10 minutes. For heavy-duty cleaning, extended soaking times up to 24 hours or more may be necessary. Use a bristle brush or scouring pad to expedite the cleaning of heavily soiled surfaces. Retreat surface as necessary until clean. Do not allow KBS Klean to dry before rinsing thoroughly with water. After rinsing, let dry. **NOTE: Metal surfaces cleaned with KBS Klean should always be treated with RustBlast before painting to ensure proper adhesion.**

For all alloys and non-ferrous metals, KBS Klean application times and dilution rates should be kept to a minimum due to the wide variations in these materials. For maximum performance, follow with RustBlast to remove surface rust, etch the metal, and leave a zinc phosphate coating (white powder residue) for superior RustSeal adhesion. For all new, smooth or shiny metal surfaces, we recommend a light scuffing with 400 grit sandpaper followed by KBS Klean

and RustBlast systems. For previously painted surfaces, remove all paint using KBS Strip or another chemical stripper followed by KBS Klean and RustBlast systems. If unable to remove any or all paint from metal surfaces, lightly scuff with 320 grit sandpaper followed by cleaning with KBS Klean.

**NOTE: If RustSeal is applied over an existing painted coating and not bare metal, it may not permanently seal rust but it will provide a very durable, moisture-resistant coating.**

### STEP #2 - RUSTBLAST - SURFACE PREP/ACID ETCH/RUST REMOVAL:

Ideal application temp range is 55-82°F. **FOR BEST END RESULTS**, remember that the surface to be treated should be free of dirt, oil, grease and other contaminants as the cleaner the surface, the more effective RustBlast will work. Be sure to have scraped off any loose rust, mill scale, paint, etc. and cleaned the surface with KBS Klean prior to using RustBlast. Liberally apply RustBlast **FULL-STRENGTH** to a **CLEAN DRY SURFACE** using a spray bottle, brush, roller, or backpack sprayer for larger applications. Re-apply often to continually keep the surface wet for a minimum of 15 minutes for smooth or lightly rusted surfaces, 20-40 minutes for moderately rusted surfaces and 1-2 hours for heavily rusted or corroded surfaces. Use a scouring pad as needed. **Do not allow RustBlast to dry on surface before rinsing.** This avoids too heavy of a zinc phosphate buildup which can adversely affect the sealing process. After treatment, rinse thoroughly with water and then allow surface **to dry completely**. For removal of light corrosion or etching of non-ferrous metals (such as aluminum, brass, copper), prepare surface as above and apply RustBlast for 10-20 minutes then rinse thoroughly with water and then allow surface **to dry completely**.

**NOTE: It is not necessary to remove every last bit of rust before applying RustSeal. RustSeal is very capable of bonding to & permanently sealing any remaining flash rust or corrosion.** After treatment with RustBlast, a slight white powder residue may appear. This is a zinc phosphate coating advantageous for RustSeal adhesion. *Some flash rust or orange staining may occur if surface was soaked, rinsed, and not dried immediately after using RustBlast. This is no problem and you are ready for RustSeal.*

### STEP #3 - RUSTSEAL - SEALING SURFACE:

Ideal RustSeal application temp range is 55°-82°F. RustSeal is moisture-cured therefore use only in moderate to dry atmospheric conditions. **AVOID** applying RustSeal in rainy or humid conditions when it is difficult to keep the surface dry. Damp surfaces may produce bubbling causing improper adhesion. Humid conditions will shorten cure time and low humidity will lengthen it. Always work in a well ventilated area. Wear protective eye wear. Wear gloves to avoid skin contact and temporary staining. Remember RustSeal must be cleaned up before it dries as it cannot be removed by any solvent once cured.

Because most of our paint is shipped at some point, there is a chance that the paint in the can might get between the can and the lid which can make getting the lid off more difficult than it might be with an ordinary paint. The main resin in RustSeal is an adhesive. If you have a plastic ring on the can lid, please remove it. It is best to use a paint can opener which has a curved or "L" shape on the end. Flat head screwdrivers are not ideal as they tend to warp the lid as you pry the lid open. Use the paint can opener to gently lift the lid in a section and then rotate the can 10 degrees and lift gently and repeat until you have gone all around the can. Go around the can once again this time lifting the lid a little more. Repeat until the lid comes off. Do NOT lift the lid in one section only as this will warp the lid and the compression seal that the lid provides, and this can sometimes make it difficult to remove the lid.

Proper stirring of RustSeal is very important for the best uniform sheen & finish. Stir paint thoroughly for several minutes to obtain an even mixture. Effective stirring includes repeatedly touching bottom of can & lifting to disperse any settled pigments and/or matting agents. Placing paint can upside down for a short time before opening & stirring will aid with proper mixing. An upside down can also be gently shaken prior to stirring. Avoid violent or excessive shaking motions which produce air bubbles that adversely affect seal & finish. Do not

substitute shaking for stirring. For the best end results, continue to stir often during the course of painting. Thinning may be required for spray applications. Reduce 5%-10% if needed using only KBS #1 Thinner or Xylene ONLY which are slow evaporating solvents. Do not reduce with lacquer thinner.

**DO NOT PAINT OUT OF CAN!** It is recommended to use quality brushes but at disposable prices as cleaning them afterwards is difficult. After a good stir, dispense a working amount of RustSeal into a separate container (steel or glass is best) and seal original can immediately. Unused paint should **NEVER** be put back into the can as it will shorten its shelf life and cause pressure build-up possibly popping the lid. Keep can groove free of paint by using a scoop or **KBS Paint Spout**. Use heavy plastic wrap between the lid and the top of the can to stop metal to metal contact as RustSeal can permanently seal the lid. If there is any trouble resealing the can lid tightly, transfer and store RustSeal in another proportionally sized can or glass jar. Always store paint in a cool dry place. RustSeal may be refrigerated for storage but you must allow paint to reach room temperature before re-use.

**NOTE ON RUSTSEAL STORAGE:** If storing for a period of time, hold can lid and plastic wrap (described above) closely above can and spray **KBS Paint Saver** towards side of the can to avoid splashing. Spray **KBS Paint Saver 2** seconds for quarts or less and 4 seconds for gallons. **KBS Paint Saver** prevents oxygen and moisture damage and extends storage times of **RustSeal**.

Apply RustSeal to **clean, dry & prepped** surfaces using a bristle brush, foam brush, roller, or spray equipment. RustSeal has superior self-leveling. Brush marks will flow out.

**SPRAYING RUSTSEAL:** FOLLOW ALL CAUTION & WARNING NOTICES WHEN SPRAYING. ALWAYS WEAR AN AIR SUPPLIED RESPIRATOR: NIOSH/MSHA approved organic vapor particulate respirator.

Thinning/Reducing is not generally required, but if needed, 5-10% is normally adequate. Use **KBS #1 Thinner** or Xylene only which are slow evaporating solvents. Do NOT reduce RustSeal with lacquer thinner. After thinning and stirring well, strain with 100 micron filter. Use an air line dryer filter to remove any moisture from the air line. Clean your spray gun immediately after spraying RustSeal.

<b>Conventional Electrostatic:</b>	Air Pressure: 40-60 psi	Fluid Pressure: 15-20 psi	Cap: Medium Visc. Tip: 1.0-1.6mm
<b>Conventional Spray:</b>	Air Pressure: 35-55 psi	Fluid Pressure: 15-20 psi	Cap: Medium Visc. Tip: 1.0-1.6mm
<b>HVLP Spray:</b>	Air Pressure: 25-35 psi	Fluid Pressure: 25-35 psi	Cap: Medium Visc. Tip: 1.0-1.6mm
<b>Air Assisted Airless:</b>	Air Pressure: 15:1 ratio pump or larger @ 80-100 psi	Atomizing Air: Adjust as needed	Cap: Medium Visc. Tip: 0.09 - 0.13"
<b>Airless:</b>	Pressure: 1500 psi min.	Tip: 0.09 - 0.11"	

**RECOATING:** Re-coating can be done once the first or consecutive coat is dry-to-touch and does not leave a fingerprint which is typically within 2-6 hours depending on temperature and humidity. If spraying, clean your spray gun immediately after using RustSeal. If you go more than 8 hours, it is best to wait 24 hours and lightly scuff the previous cured coat of RustSeal with 320 grit or a green scotch-brite pad.

Always apply a **MINIMUM** of 2 **THIN, COVERING COATS** (2 mils each) for general applications. For marine or industrial applications, apply a **MINIMUM** of 3 **THIN, COVERING COATS** (2 mils each). Use a Pre-Val Sprayer for convenient access to any hard to reach areas.

**FOR BEST END RESULTS,** always apply **THIN COATS** consecutively within 6 hours of each coat curing. **NOTE:** Do not apply RustSeal in rainy or humid conditions. Do not apply RustSeal in thick or heavy coats. Do not apply additional coats before prior coat has dried to the touch and does not leave a fingerprint. These application errors can cause the occurrence of surface bubbling as the top layer of RustSeal skins over like pudding and traps solvent gas underneath.

**NOTE ON BRUSHING:** When brushing RustSeal, for best results, do not overwork the brush as this can cause the RustSeal to cure too quickly possibly leaving visible brush marks. It is best to brush an area with RustSeal and move on immediately versus brushing an area over and over again. If you brush over an area over and over again forcing the solvents out, you run the risk of the brush marks not flowing out as well they are designed to flow out.

### **TOPCOATING RUSTSEAL:** (optional)

Please note that RustSeal is not intended for use as a final finish when used where the coated surface will be consistently exposed to sunlight. Repeated or prolonged exposure to direct UV light will cause cosmetic alteration to its color and sheen. RustSeal's guaranteed rust protective properties, however, will not degrade. In areas not exposed to direct UV light, like the underside of a car, RustSeal will seal as well as serve as a great looking final finish.

To protect against unwanted cosmetic changes, topcoat RustSeal with any opaque paint system. Please note that a clear topcoat (like **DiamondFinish Clear & KBS MAXX Clear**) **DO NOT** provide the needed UV protection. Choose the closest color associated RustSeal primer to compliment your topcoat and protect against potential visible surface chips.

**BlackTop, KBS MAXX, and KBS TOP COATER** are high performance protective coatings like RustSeal and are an ideal topcoat for all UV exposed parts. When **BlackTop, KBS MAXX** or **KBS TOP COATER** are used as a topcoat over RustSeal, they produce an incredibly tough, durable and professional looking finish.

There are three effective ways to topcoat RustSeal (with **BLACKTOP, KBS MAXX, KBS TOP COATER** or other solid color top coat paints) effectively so that the coatings bond & fuse together. Please choose the one that works for your project.

- 1) Apply your top coat once the second or final coat of RustSeal is dry-to-the-touch and does not leave a fingerprint (usually 3-8 hours depending on temperature and humidity).
- 2) Let the second or final coat of RustSeal fully cure (at least 24 hours), scuff the RustSeal with 320 grit, then apply your top coat.
- 3) Let the second or final coat of RustSeal fully cure (at least 24 hours), dust the RustSeal with **Fusion Self-Etching Primer**, let the Fusion cure for 30 minutes, then apply your top coat.

### **CLEAN UP:**

Use **KBS #1 Thinner** or lacquer thinner for **immediate** clean up including your spray gun. **IMPORTANT:** Remember RustSeal must be cleaned up before it dries. 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 RustSeal should stain your skin, only time will remove it.

Sprayable VOC's (Using KBS #1 Thinner): <200g/l

**Please see SDS and follow all warning and cautions.**  
**Made in the USA.**

Information contained herein is to our knowledge true and accurate, but all recommendations or suggestions are made without guarantee. Since application lies outside our control, we cannot accept any liability for the results. User shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith.

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