

RUST GRIP® APPLICATION INSTRUCTIONS

DESCRIPTION

RUST GRIP is a one-part, metallic-filled, moisture-cured penetrating polyurethane that can be used as a primer, topcoat or to encapsulate. It can be applied to metal, concrete, masonry and wood, as specified.

SURFACE PREPARATION

Surface must be clean from oil, tar, rust, grease, salts, and films.

- Use general degreaser if needed
- Clean surface using TSP (tri-sodium-phosphate) or a citrus cleaner to release dirt and degreaser residue
- Pressure-wash if possible @ 3500 psi
- Salt contamination on a surface can come as a result of salt water, fertilizers, car exhaust etc. Use Chlor*Rid or equivalent to decontaminate surface if salts are present. Acceptable levels: Nitrates: 5-10 mcg/cm², Sulfates: 5-10 mcg/cm², Chlorides: 3-5 mcg/cm²

Surface must be completely dry before applying.

- RUST GRIP must be applied during proper temperatures and the prescribed overcoat window of the coating over which it will be applied
- If applied over an existing coating having a glossed or shiny finish, it must be sanded and roughed to remove gloss before application, to improve the profile
- Additional coats of RUST GRIP can only be applied when the 1st coat becomes tacky to the touch and has little to no transfer of coating. After this stage, the surface must be lightly sanded to improve the profile.

NOTE: If pack rust or mil-scale exists, they must be removed by grit blast, power tool or needle gun. Glossy surfaces should be sanded to a dull finish to improve the profile and enhance adhesion. If milscale exists on hot rolled steel, the pores will be blocked and the surface must be taken to a SSPC – SP6 or SP11. Once these steps are taken, begin Surface Preparation Instructions. (Above)

MIXING

- Mix by hand or with a power drill using low-medium speed with NO vortex. (A vortex will draw moisture into the coating.)
- When the container is opened, the coating will be a yellowish green color. Mix continuously (with no vortex) until the entire surface of the coating turns a silver gray color. Once the coating color has turned completely silver-gray, mix for two more minutes making sure all paste is off of the bottom. Stirring this paste distributes the metallic pigments throughout the coating.





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NOTE: Once container is opened, the product must either be used completely, or sealed with plastic before reattaching lid after use, or repackaged and sealed well in an unlined metal can. Product may thicken if left open in can. Pour off the amount you intend to use after proper stirring. If left open, the product will harden in the container. For start & stop (lunch), drop gun into solvent pail and cover.

POT LIFE

4 hours at 70°F (21°C) at 60% or higher Relative Humidity.

- Cooler temperatures lengthen pot life. Warmer temperatures shorten pot life.
- Higher humidity shortens pot life. Lower humidity may lengthen pot life.

CURE TIME

- 30-60 minutes to tack-free when 70°F (21°C) at 40% relative humidity
- Fully cures in thirty days when 70°F (21°C) at 40% relative humidity

APPLICATION

- RUST GRIP can be applied by soft bristle brush or ¼" nap roller made for solvent use or spray. If application is by spray, use a standard airless sprayer (1.5 gallons/minute at 3,300 psi) with a .013-.017 tip.
- In all applications (brush or roller), apply at "half-speed" and use a cross-hatch method (side-to-side, then top-to-bottom) slowly to prevent pinholes and allow penetration
- If encapsulating rust, lead-based paint, other bio-hazardous materials or bridges, brushing is the preferred application method. Apply the first coat by brush (keeping it very wet at all times), using the cross-hatch method. Go about 30 feet then return to the beginning and apply a second coat identical to the first. A third coat may be required. This method will insure the coating is worked into the pores and fully encapsulates the existing surface, while leaving enough coating over the surface to avoid pinholes.
 - Maximum / Minimum surface temperature when applying: 150°F (65°C) / 50°F (10°C)
 - Maximum surface temperature after curing: 325°F (163°C)
 - Failure will occur at a constant temperature =/> 325°F (163°C)

NOTE: The number of coats necessary and the thickness of each will be in accordance with the job specifications, blast profile, or rust profile.

NOTE: Temperatures must always be a minimum of 5 degrees above the dew point during application.





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NOTE: At high RH values of 60% or more, RUST GRIP cures very quickly and the window for applying another layer of coating is very short. At 85% RH, it could be determined that one has only an hour or less over-coat window depending on the ambient temperature. The higher the temperature, the faster solvents evaporate out of the coating. It is always best to overcoat immediately when the first coat of RUST GRIP becomes dry to the touch. Since the curing process is so dependent on ambient temperature and RH, the physical touch-test is always the best approach when working in high humidity environments. RH of 60% and up.

NOTE: Surface profile must be factored when estimating the spread rate and amount of product required. Allow for penetration into the profile and adjust accordingly (i.e. if the profile takes 2 mil (50 micron) to fill before achieving the 4 mils (100 microns) then you must figure 6 mil (150 microns) dry as the appropriate spread rate).

NOTE: If longer drying times are required or application is confronted with high ambient and/or surface temperatures please contact SPE.

NOTE: HIGH-HEAT SYSTEM:

- a) HOT PIPE COATING applied over hot surface at thickness according to temperature level
- b) RUST GRIP applied @ 150sf (145sm) for toughness
- c) ENDUROOF for water/air seal plus flex for movement

NOTE: Apply RUST GRIP at a minimum thickness of 8 mils wet / 4 mils dry over the highest peaks of the surface profile. Allow for absorption into the substrate and the filling profile when figuring spread rate.

NOTE: Use Acetone to aid in drying surface before applying RUST GRIP when needed. DO NOT use mineral spirits or any other solvent for this purpose.

CLEANING EQUIPMENT

- If breaks are taken, spray systems should be flushed with solvent
- After completion, spray system should be flushed and cleaned with solvent; brushes and rollers should be discarded

LIMITATION OF LIABILITY: All recommendations or suggestions relating to the use of the products, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge is reliable. The products and information are designed for users having the requisite knowledge and industrial skills, and the end-user has the responsibility to determine the suitability of the product for its intended use. SPE has no control over either the quality of condition of the substrate, or the many factors affecting the use and application of the product. Therefore, SPE does not accept any liability arising from loss, injury, or damage resulting from such use or the contents of this data sheet. The information contained in this data sheet is subject to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and the user has the responsibility to ensure that this sheet is current prior to using the product.

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