



**THE RUSCOE  
COMPANY**  
Adhesives &  
Sealants

# RELIOBOND RB-1800 & RB-1803

## Metal Primers For Friction Bonding

RB-1800 and RB-1803 are phenolic resin primers designed to protect metal from corrosion and enhance bond strength of friction material assemblies. RB-1800 and RB-1803 are typically used as core primers for drum brake assemblies, but can also be used as a metal primer on any other type of friction part. Both RB-1800 and RB-1803 are supplied "ready-to-use" and do not require dilution for most applications.

### TYPICAL PROPERTIES: (NOT FOR SPECIFICATION PURPOSES)

	<b>RB-1800</b>	<b>RB-1803</b>
<b>Solids</b>	> 25%	> 13%
<b>Density (Weight per Gallon)</b>	7.54 #/gal	7.78 #/gal
<b>Color</b>	Amber/Tan	Black
<b>Shelf Life*</b>	12 months	12 months

\*When stored at temperatures less than 80°F (27°C) in original unopened container. See "Storage" for details.

### APPLICATION INSTRUCTIONS:

#### Surface Preparation:

All metal surfaces must be free of oils, dirt, and other contaminants. Typical cleaning processes include aqueous alkaline cleaners, solvent vapor cleaners, burning or baking contaminants off the surface. After cleaning, a surface preparation process like phosphating, grit blasting, or wheel abrading will enhance the adhesive bond. Reliobond primers will bond very well to a clean, bare metal surface, but preparing the surface with one of these methods will improve the consistency and overall strength of the bond.

#### Adhesive Application:

RB-1803 should be thoroughly mixed before application to ensure adequate dispersion of the black pigment. RB-1800 does not require mixing.

RB-1800 and RB-1803 are typically applied to the metal surface by dipping the part into the primer solution. These products can also be applied by spray or roller. For most applications, a dry film thickness of 0.7-1.5 mils will provide adequate corrosion protection and bond strength. Experimentation with each part design is required to determine the optimum primer thickness.

#### Drying:

Reliobond primers must be fully dried before curing. Environmental conditions, coating thickness, and drying equipment type all significantly affect dry time. Here are some general guidelines for drying:

- Drying oven temperatures can range from 100°F-250°F. Do not exceed 250°F as higher temperatures can prematurely cure the adhesive or cause blistering of the adhesive film.
- Air flow in the drying oven is crucial to achieving fast dry times. More air flow will reduce dry time.
- Contact Ruscoe Technical Service for a test procedure to determine if your part is fully dried.

#### Curing:

RB-1800 and RB-1803 are designed to co-cure with the chosen bonding adhesive. See the product data sheet for the bonding adhesive used for information on curing parameters.

#### Cleaning:

Reliobond primers can be cleaned prior to cure using methyl ethyl ketone, acetone, n-butyl acetate, methyl acetate, or t-butyl acetate solvents. If the adhesive is fully cured the only practical methods of removal are abrasion, burning, heating above 600°F for many hours, or soaking in a highly caustic solution. Consult MSDS for instructions on spill clean up and disposal.

#### Storage:

Recommended storage temperature is 40°-60°F (4°-16°C). Storage at temperatures above 60°F will cause significant increase in viscosity and eventually loss of adhesive performance. Parts that have been precoated and dried can be bonded within 6 months if stored in a clean, dry area at temperature below 85°F (30°C).

*continued*

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All statements, technical information and recommendations contained herein are based on tests believed to be reliable, but the accuracy or completeness is not guaranteed, and the following is made in lieu of all warranties expressed or implied.

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of, or the inability to use the product. Before production, user shall determine the suitability of the product for their intended use and assumes all risk and liability in connection with and production.

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