

TECHNICAL DATA SHEET



RELIOBOND® 2000

DESCRIPTION

Ruscoe's Reliobond® 2000 is an unmodified phenolic resin adhesive in solvent with a black dye. Reliobond® 2000 is a dilution of Reliobond® 2001 and is formulated for spray application.

SUGGESTED USES

Reliobond® 2000 is recommended as an adhesive for disc brake backing plates.



METHOD OF APPLICATION & GUIDELINES

Further dilution with solvent is not required for spray application

1. Clean the steel backing plate with degreaser detergent of some kind.
2. Grit blast to roughen the surface (optional). A roughened surface bonds best.
3. Spray coat the steel backing plates with Reliobond® 2000 resin. Reliobond® 2000 resin has a black dye added so that coated parts will be visibly distinguished from uncoated parts after drying.
4. Lay the plates down horizontally to dry before stacking them. The solvent evaporates quickly. Usually, 4-6 hours at room temperature is sufficient to evaporate the solvent leaving behind a thin film of resin adhesive that is no longer sticky.
5. If necessary, faster drying can be done using low temperature ovens and/or forced air fans. Do not "over dry" since the resin is heat reactive. Low oven temperatures (40°C – 50°C) are better. Minimize the time in the oven. Do not dry the adhesive at elevated temperatures >80°C as this will B-stage (partially cure) the resin. The B staged adhesive coated steel plate will have less cohesive strength when the friction material is bonded to the steel plate and thus shear strength of bonded friction material will be lower.
6. Although a single coat of adhesive may be sufficient, in some cases it is necessary to repeat steps 3-5 multiple times to achieve the thickness needed for proper bond strength. Approximately 0.002 inches is a good starting target thickness. However, each customer must determine the exact value needed by trial and error using shear strength data as your quantitative measurement of adhesive effectiveness.
7. Adhesive coated steel backing plates can then be used in any positive press or flash molding operation. The resin adhesive will melt and cure with heat and pressure forming a strong bond with the backing plate while bonding with the friction material. Normal molding operations are done between 145-175°C for 2 – 5 minutes, followed by a post bake in an oven at 175-200°C for 2-6 hours. The adhesive should cure and bond well under these conditions

STORAGE AND SHELF LIFE

This product is a heat-reactive material and should be stored in closed containers at, or below 80°F. Shelf life is 12 months from date of manufacture when stored appropriately. See Safety Data Sheet for more information on storage and disposal.

HEALTH AND SAFETY

Health and safety data sheets available upon request at The Ruscoe Company.

TYPICAL PROPERTIES

| | |
|---------------------|------------|
| Color | Black |
| Solids, by Weight % | 10% |
| Solvent(s) | Ethanol |
| Density | 6.9 #/gal |
| Viscosity, Ford Cup | 10 seconds |
| Shelf Life | 12 Months |

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