

Bonding Agent 1K - Part # 50507

**DESCRIPTION:**

Rhino Linings® Bonding Agent 1K is a convenient-to-apply, single component primer system. Designed as a standalone product for porous substrates, the VOC free, Bonding Agent 1K is a moisture-cure MDI formulation which has low viscosity.

Adding solvents to primers in order to reduce viscosity and foaming effects is common industry practice. The overall lower viscosity helps improve the penetration into porous substrates, thus increasing the bond strength. Solvents can be added to Bonding Agent 1K to thin for spraying. When using solvents all safety precautions must be observed as solvents are flammable. Follow all OSHA guidelines when working with solvent systems. Recommended solvents are Butyl Acetate, Xylene, MEK or Acetone.

**FEATURES & BENEFITS:**

- Easy to use, no sanding required
- Ability to be applied by phenolic resin core roller, brush or airless spray gun
- Excellent adhesion to steel, wood, concrete, FRP and many other surfaces
- Good flexibility – withstands mechanical stresses where the lining is subject to impact
- Low viscosity – easy to process
- Pigmented yellow for easy visual confirmation of application

**CHEMICAL PROPERTIES:**

Test	Component
Specific Gravity (grams/cc)	ASTM D-792 1.16
Viscosity, CPS at 77°F (25°C)	425 ± 50
Solids by Volume/Weight	100%
Volatile Organic Compounds	0 lbs/gal
Tack-free/solid (min)	35 @ 70°F (21°C), 50% RH (see Application Guide)
Recoat (hrs)	≤24
Theoretical Coverage (1 gallon)	300 – 500 sqft @ 3 – 5 mils
Shelf Life - Unopened Container	6 months
Color	yellow

**TYPICAL PHYSICAL PROPERTIES:**

Test	Result
Tensile Strength (psi)*	ASTM D-412 3300 ± 200
Tear Resistance (pli)* Die C	ASTM D-624 450 ± 50
Elongation (%)*	ASTM D-412 80 ± 5

**PROCESSING CHARACTERISTICS:**

Equipment Used
Phenolic resin core roller, brush or airless spray gun

Process Temperatures and Relative Humidity

Component Temperature	Substrate Temperature	Humidity
70°F (21°C)	>50°F (10°C) and ≥5°F (-15°C) above dew point	≤50%

**APPLICATION GUIDE:**

Bonding Agent 1K cure is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time. Low temperature and/or low humidity extend the cure time. Surface must be maintained free of contaminates and dry during this period.

**STORAGE:**

Store in a closed container between 70°F (21°C) to 90°F (32°C)

**SUBSTRATES:**

Metals, wood, concrete, polyester fiberglass

## **BONDING AGENT 1K** *(continued)*:

### **HOW SUPPLIED:**

Bonding Agent 1K is packaged in quart (0.9 liter), gallon (3.8 liters) or hedpak (15.1 liters) containers.

### **SAFETY PRECAUTIONS FOR RHINO™ BONDING AGENT 1K:**

#### **Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)**

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

**For Your Protection:** The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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