



## RhinoPrime 251 Technical Data Sheet

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### **DESCRIPTION:**

RhinoPrime 251 is a two (2) component polyurethane Primer for use on steel, galvanised metal, tin and aluminium. This primer may also be used on some plastics, fibreglass, or polyurethane surfaces. RhinoPrime 251 has a high resistance to acids, hydrolysis and excellent results in the salt spray and hot air tests. RhinoPrime 251 withstands various mechanical stresses, where the liner is subject to impact.

### **PROCESSING RECOMMENDATIONS**

<b>Mixing Ratio:</b>	By weight is 250 grams of side B to 100 grams of side A <i>For maximum performance it is crucial to measure accurately.</i>
<b>Shelf Life:</b>	Side A – 12 months in unopened container Side B – 12 months in unopened container
<b>Pot Life:</b>	60 minutes @ 27°C
<b>Application Temperature (Min):</b>	16°C
<b>Viscosity:</b>	Side A: 120 cps Side B: 12,000 cps
<b>Flash Point:</b>	Side A: 218°C Side B: 150°C
<b>Colour:</b>	A-side is light brown. B-side is dark grey Combined primer is light olive green to grey

**Coverage Rate:** One unit at 5mil (127 micron) will cover approximately **16.6sqm**, with 10% Acetone, one unit will cover approximately **18.5sqm**.

One unit at 10mil (254 micron) will cover approximately **8.3sqm**, with 10% Acetone, one unit will cover approximately **9.25sqm**.

Coverage rate varies depending on porosity of the substrate, type of spray tip and thinning quantity used.

**One unit = 1 kit of 1.41Lt (Part No. PC721) and 1mil = 1 thou = 25.4 micron**

**Properties:** RhinoPrime 251 has a high resistance to acids, hydrolysis and excellent results in the salt spray and hot air tests. RhinoPrime 251 withstands various mechanical stresses where the liner is subject to impact.

### **HANDLING & STORAGE**

Store below 130° F (54° C) in tightly closed containers. Use product within one month after opening. Do not use in poorly ventilated or confined spaces. Do not store in open, unlabeled or mislabelled containers. **Please see Material Safety Data Sheets for this product for further safety precautions and container disposal**

### **MIXING INSTRUCTIONS:**

Pre-mix side B thoroughly, by mechanical or stir stick. Side A can be shaken or stirred. Measure by weight, side A and side B according to the chart which follows. B-side can settle out and will need extra mechanical stirring. mix until solids are remixed in and the B-side is lump free. **It is important to remember to reseal each container immediately after measuring, in order to avoid moisture contamination.**

### **MIXING RATIO GUIDE**

30 GRAMS MIX TOTAL:	B @ 25 GRAMS	A @ 10 GRAMS
70 GRAMS MIX TOTAL:	B @ 50 GRAMS	A @ 20 GRAMS
105 GRAMS MIX TOTAL:	B @ 75 GRAMS	A @ 30 GRAMS
140 GRAMS MIX TOTAL:	B @ 100 GRAMS	A @ 40 GRAMS
280 GRAMS MIX TOTAL:	B @ 200 GRAMS	A @ 80 GRAMS
350 GRAMS MIX TOTAL:	B @ 250 GRAMS	A @ 100 GRAMS

### **SURFACE PREPARATION:**

All surfaces must be free of all dirt, grease, oil laitance or unsound material that would interfere with maximum adhesion. Wipe with acetone prior to applying primer. After surface cleaning is complete, make sure that work area is well ventilated.

**Steel:** All rust and corrosion must be removed either by sand blasting or grinding. Any existing paints or coatings judged to be sound must be cleaned and solvent wiped. Under coatings must be removed.

**Galvanised Steel:** Light sanding and solvent wipe. (For best results use distilled vinegar)

**Aluminium and Tin:** Acid etch with 12% solution of muriatic acid. Light sanding and solvent wipe.

**Fibreglass and Some Plastics:** Light sanding and solvent wipe. (All plastics need to be sanded aggressively and spot tested for adhesion prior to use). High-density polyethylene (HDPE) is not recommended.

**Polyurethanes:** Sand lightly with scotch-brite pads and solvent wipe before application. Use primer and solvent mix to improve adhesion for polyurethane to polyurethane.

**APPLICATION TABLE:**

Mixture may be applied by spray only. In order to spray RhinoPrime 251, it is necessary to thin with acetone. Mixture may be thinned with 10% acetone. When thinned, RhinoPrime 251 should be applied at a rate of approximately 75 to 125 micron, dust coat, average thickness. When thinning, mix A and B components first, then add acetone immediately to extend pot life. Apply as uniform as possible in a circular pattern. RhinoPrime can be wiped on with a rag. For rough or textured surfaces a roller may be more suitable.

**It is imperative to have safety-approved ventilation and fresh air respirator designed for solvent paint systems. Protective clothing must also be worn. See MSDS. DO NOT use solvents inside any confined areas such as tanks.**

**Cure Time: Applied to Automotive Panel Surface**

Surface Type	Ambient Temperature	Dry Time (Tack Free)
Automotive Panel Surface @ 100% Rhino Prime 251	32°C	45 min
	16°C	90 min
Automotive Panel Surface Rhino Prime 251/10% Acetone	32°C	60 min
	16°C	120 min

Extreme humidity will slow dry time (over 80% relative humidity). Local Air Quality Management Authority may govern choice of solvent and amount added. Comply with all regulations and law regarding proper and safe use of solvent.

**RECOAT WINDOW**

10 hours from when 251 has become tack free.

**REACTIVATION**

To re-activate 251, solvent wipe the surface with acetone and re-apply a dust coat of 251. The same recoat window applies.

**PRIMER APPLICATION TABLE**

Substrate	Aluminium	Brass	Copper	Cast Iron	Concrete	Fibreglass (Gel Coat)	Galvanised Steel	Plastic	Polyurethane (Tuff Stuff)	Stainless Steel	Steel	Some Wood Products
RhinoPrime 251	✓	✓	✓	✓	----	✓	✓	✓	✓	✓	✓	✓

**SAFETY PRECAUTIONS OF RhinoPrime 251**

**Health Considerations: Consult the Rhino Linings Material Safety Data Sheets.**

The uncured components of RhinoPrime 251 can cause irritation to the eyes, skin, mucous membranes and are harmful if swallowed. When handling, avoid contact with eyes and skin (especially open cuts). In case of contact, immediately wash off with plenty of water for at least fifteen (15) minutes. For eyes, obtain medical attention. Always wash hands before eating. Obtain immediate medical attention in case of ingestion. In case of extreme exposure or adverse reaction, remove affected personnel to fresh air immediately and obtain medical help.

**Important: Consult the Rhino Linings Material Safety Data Sheets.**

Read and follow warning labels on all components. For professional use only. Follow cautions and handling guidelines in Rhino Linings Technical Reference Manual. The information herein is believed to be reliable, but unknown risks may be present. All warranties of any kind, expressed or implied, including warranties of fitness for a particular purpose, are specifically disclaimed.

**For Your Protection**

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