PRODUCT DATA SHEET

MASTERGUARD PR 331

PRODUCT CHARACTERISTICS

Description

This product is a two components amine cured, high solids, and high build epoxy primer and high contain zinc phosphate designed for rapid cure even at low temperatures, with a workable pot-life and the ability to resist moisture during cure.
It can be applied in marine and other severe service industrial environments and is suitable for fresh and salt water immersion resistance.

Recommended use

Masterguard PR331 is a fast drying epoxy primer. Recommended for offshore environments, refineries, power plants, bridges, buildings and mining equipment.

Colors

White, Grey, Red oxide.
Other colors may be available upon request. Contact your Pacific Paint Sales / technicals for availability.

Product Data

Parameters	Values
Solid Volume	72 ±2
Gloss Level (angles 60°C)	Matt (0 – 40 %)
Flash point	25°C
Density mix	1.65 - 1.75 gr/lt
Dry film Thickness	100 - 200 µ
Wet Film Thickness	145 - 290 π
Theoretical Coverage Rates	7.2 - 3.6 m^2/lt
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
Limitations	Epoxies may lose gloss, discolor and chalk when exposed to sunlight.

SUBSTRATE & SURFACE PREPARATIONS

General

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination that can reduce adhesion via SSPC-SP1 solvent cleaning

Metal

Abrasive blasting is recommended to remove rust and mill scale. Solvent clean surfaces according to SSPC-SP1, then perform a commercial blast to SSPC-SP6 for mild exposures. For immersion service and severe environments, solvent clean surfaces according to SSPCSP1 first, then perform a near-white blast SSPC-SP10.

Previously Painted Surfaces

All previously painted surfaces should be cleaned thoroughly to remove surface contamination. Rinse well and allow to dry. Scrape loose, scaly, peeling paint and sand the edges smooth, remove any rust and scale from ferrous metal. If the paint is glossy, sand to dull the surface. Test for compatibility with existing coatings

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MIXING & THINNING

Mixing

Power mix base, then combine and power mix with ratio as follows:
Masterguard PR331 part A : Materguard PR331 part B
part A by volume : part B by volume = 4 : 1 by volume

Thinning

May be thinned up to 5% by volume with Thinner 3 for spray application

Pot Life

Pot life end when coatings become too thick to use. At 28°C ~ 2 hours

APLICATION EQUIPMENT

Listed below are the general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray application (general)

Use the adequate air volume for the correct operation. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.
Note: the following equipment has been found suitable; however, equivalent equipment may be substituted. The following spray equipment has been found suitable and is available from manufacturers such as Binks, De Vilbess and Grace. Agitate the mixed material continuously during application. If spraying stops for more than 10 minutes, recirculate the material remaining in the spray line.

Conventional spray

Agitated pressure pot equipped with dual regulator, a 3/8" I.D. minimum material hose. A 50' maximum material hose, a .70" I.D. fluid tip and an appropriate air cap. Use a 3/8" minimum I.D. material line. Hold the gun 8-10 inches from the surface and at the right angle

Airless spray

Pump Ratio: 30: 1 (mins)
GPM Output: 3.0 (mins)
Material Hose: 3/8" I.D. (mins)
Tip Size: 0.019-0.023"
Output PSI: 1500-2000
Filter Size: 60 mesh
PTFE packing are recommended are available from the pump manufacturer.

Brush & Roller (ONLY recommended for stripe coating and small areas)

Spray application is preferred. May be brushed or rolled using a natural bristle brush or a short nap roller.

APLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	135°F (57°C)	135°F (57°C)	85%

Do not apply or cure the material when the surface temperature is below 50°F (10°C) or less than 5°F (3°C) above the dew point. Special thinning and application techniques maybe required above or below normal conditions.

DRYING TIME

Surface Temperature	Surface Dry (minutes)	Hard Dry (hours)	Cured (days)
80°F (27°C)	60	4	7
90°F (32°C)	50	3	6
100°F (38°C)	40	2.5	5

Determined based on wet film thickness 76 micron at standard conditions.

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HEALTH AND SAFETY

Safety

Read and follow all caution statements on this product datasheet and on the MSDS for this product. Employ normal workman like safety precautions. Use adequate ventilation and wear gloves; or use protective cream on face and hands if hypersensitive. Keep the container closed when not in use.

Ventilation

When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor the exposure levels to ensure all personnel are below guidelines. If not sure or if not able to monitor the levels, use an OSHA/NIOSH approved respirator.

Caution

This product contains flammable solvents. Keep away from sparks and open flames. In confined areas, workmen must wear the appropriate respirator protection. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use nonferrous tools and wear conductive and non-sparking shoes.

Clean up

Use Thinner 3 In case of spillage, absorb, and dispose of in accordance with the local applicable regulations.

PACKAGING, HANDLING AND STORAGE

Shipping Weight (Approximate)

5Liters Set:	Part A = 4Liters (7 Kg)
	Part B = 1Liters (.97 Kg)
20Liters Set:	Part A = 16Liters (28 Kg)
	Part B = 4Lites (3.87 Kg)

Handling

Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Pacific Paint's Safety Data Sheet for this product along with the Product Data Sheet.

Storage Temperature & Humidity

Temperature : 40 – 110°F(4-43°C)
Humidity : 0 – 100%

Shelf Life

24 / 48 months minimum at 32°C (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. Part A : 24 months. Part B : 48 months

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Pacific Paint Factory to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Pacific Paint Factory quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Pacific Paint Factory sole obligation, if any, is to replace or refund the purchase price of the Pacific Paint product(s) proven to be defective, at Pacific Paint Factory option. Pacific Paint Factory shall not be liable for any loss or damage.

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