



## FEATURES

- : Waterguard 97 Primer is a two pack epoxy waterborne and polyamide high performance
- : Hardness film waterborne epoxy for floor and wall.
- : Abrasion resistance.
- : Chemical and stain resistance.
- : Resists splash and spillage of alkali, salt, moisture, oil, grease, foodstuffs and detergents.
- : Long lasting tile - like finish.
- : Easy application, lower odor and fast dry.
- : Easy washed and cleaned.
- : No contained Lead and Mercury.
- : Safety health for user and tenant.
- : Suitable for general factory, food industry, pharmaceutical industry, dairies food center, canteen, school, nursing home, hospital, hotel, department store and supermarket.
- : This product is designed as a sealer or primer for concrete floor in facilities such as commercial building or industrial plants, home where the presence of solvent odors and/or flammability problems would normally prohibit the application. May be used in area subject to continuous moisture such as shower room, it penetrates and dries concrete to improve adhesion and provide maximum bondability for finish top coat. Moreover, it is a rust inhibitive primer for steel, aluminium, stainless, galvanized metal, concrete, masonry, glazed brick, ceramic tile, fresh concrete and previously coated surface.

## TECHNICAL INFORMATION

- Type : Epoxy / Polyamide Waterborne Primer
- Color : Grey
- Film appearance : Matt
- Specific gravity : 1.45 ± 0.02
- Solid by volume : 50 ± 2 %
- Flash point : Not Flammable

		Minimum	Maximum	Recommended
Dry film thickness	(Microns)	40	60	50
Wet film thickness	(Microns)	80	120	100
Theoretical coverage.	m <sup>2</sup> / Liter	12.5	8.3	10.0
	m <sup>2</sup> / Gallon	47.3	31.5	37.9
Practical coverage.	m <sup>2</sup> / Liter	11.3	7.5	9.0
	m <sup>2</sup> / Gallon	42.6	28.4	34.0

Remark : Actual Surface coverage will depend on surface irregularities, Mixing, Application Condition method and technique; as well as the structure and dimensions of the object to be coated.

	Temperature	25 °C	30 °C	35 °C
Touch dry	Surface dry	30 mins	25 mins	20 mins
Full cure	Hard dry	2 hrs.	1.5 hrs.	1 hr.
Recoat dry	Minimum	24 hrs.	24 hrs.	24 hrs.
	Maximum	-	-	-
Potlife		4 hrs.	3.5 hrs.	3 hrs.

Remark : Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly.



## FILM PERFORMANCE

Properties	Test Method	Criteria	Results
Adhesion	ASTM D 3359	5B	Passed
Flexibility	ASTM D 522 (Method B)	3 mm	Passed
Impact Test	ASTM D 2794	60 inch-pounds	Passed
Abrasion Resistance	ASTM D 4060	200 mg (Loss)	Passed
<small>CS-17 Wheels, 1000 g load, 1000 cycles</small>			
Chemical Resistance	ASTM D 1308	24 hrs.	Passed
Pencil Hardness	ASTM D 3363	2H	Passed

## APPLICATION

Mixing Ratio	Part A	Part B	
By Volume	4	1	
By Weight	5	1	
Application Method	Airless Spray	Air Spray	Brush / Roller
Diluted by WATER	5-10	15-20	10-15
Applicator	Graco 415 Graco 513	Coventional Spray (Iwata)	Short Hair Stiff Nylon Roller (Stanley) Stiff Nylon Brush
Pressure	120-150 kg/cm <sup>2</sup>	3-4 kg/cm <sup>2</sup>	-

Mix Part A and Part B, strictly follow mix ratio recommendations before dilute by Thinner mixing and stir for 2-3 minutes until the mixture is homogeneous after leave 5 minutes before application.

## APPLICATION SYSTEM

### Surface Preparation

#### Steel

: Should be blast cleaned in accordance with NACE No.2 / SSPC-SP10 / ISO 8501:1 / SIS Sa 2.5 to a near-white finish using a suitable abrasive. And/or by use the surface preparation with requirements of the primer and/or as the Spec of the project.

Remark : The surface must be thoroughly dry and apply the protective coating within 4 hours to cleaned surface.

#### Wall

: For New concrete - The concrete prior to laying plastic sheets to block moisture from underground. Then it should be left for curing concrete to solid and dry for about 3-4 weeks. Then, clean the surface free from dust, dirt, grease and most importantly, the surface is completely dry.

(Check moisture content must be less than 14%)

: For Old concrete - To remove the old paint film which loosely adhesion to as much as possible by Scraping with a shovel or Grinding machine to enhance adhesion. Then, clean the surface free from grease and oil with suitable solvent. Before primer coating should clean all surfaces free from dust, dirt, grease and most importantly, the surface is completely dry. (Check moisture content must be less than 14%).

#### Before Recoat by Topcoat

: Remover all oil, grease, dirt, oxide and other foreign material by cleaning per SSPC-SP1, Solvent Cleaning before coating.

: If over 7 days gives cleaning surface by sand paper no. 320-400 and cleaning surface per SSPC-SP1, Solvent Cleaning before coating.

: Surface repara (cracks, pores, holes) done with TOA Epoxy putty and polishing of surface with moltoprene disk.



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<p><b>Coating System</b></p> <p>Protective Coating</p> <p>Concrete protective Coating</p> <p>Recommendation</p>	<p>: <b>Primer</b>                      <b>Waterguard 97 primer</b>                      <b>50 microns x 1 coat</b></p> <p>: Topcoat                      Waterguard 99 topcoat                      50 microns x 2 coats</p> <p>: <b>Primer</b>                      <b>Waterguard 97 primer</b>                      <b>50 microns x 1 coat</b></p> <p>: Topcoat                      Waterguard 99 topcoat                      50 microns x 2 coats</p> <p>: The proper relative humidity in the work shall not exceed 85% RH.</p> <p>: The temperature of the substrate should be minimum 10 °C and at least 3 °C above the dew point of the air , temperature and relative humidity measured in the vicinity of the substrate for prevent moisture and water drop on substrate effective adhesion and drying time.</p>								
<p><b>HANDLING AND STORAGE</b></p> <p>Storage condition</p> <p>Shelf life</p> <p>Package</p>	<p>: The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition.</p> <p>: 24 months at 30-35 °C</p> <p>: The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 30%;">Packaging size</td> <td style="width: 20%;">Part A :</td> <td style="width: 20%;">Part B :</td> </tr> <tr> <td></td> <td>1 Gallon Set</td> <td>1 Gallon</td> <td>1/4 Gallon</td> </tr> </table>		Packaging size	Part A :	Part B :		1 Gallon Set	1 Gallon	1/4 Gallon
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<p><b>HEALTH AND SAFETY</b></p>	<p>: Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.</p> <p>: For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Safety Data Sheet.</p>								
<p><b>DISCLAIMER</b></p>	<p>: The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything only the quality of the product itself. We reserve the right to change the given data without notice.</p>								