**EPOGUARD PRIMER** 

## **Technical Data Sheet**



FEATURES										
	: Epoguard Primer is a	: Epoguard Primer is a high-build Epoxy / Polyamide Zinc Phosphate primer.								
	: As a high-build rust-	: As a high-build rust-preventing epoxy primer for steel structure, tank, pipe, bridge and chemical plant.								
<b>TECHNICAL INFORMATION</b>										
Туре	: Epoxy / Polyamide	: Epoxy / Polyamide Anti-Corrosive Zinc Phosphate primer								
Color	: Reddish Brown									
Film appearance	: Semi-Gloss									
Specific gravity	: 1.36 <u>+</u> 0.05									
Solid by volume	: 58 <u>+</u> 2 %									
Flash point	: 21 °C									
	N	linimum	Maximum	Recommended						
Dry film thickness	(Microns)	100	150	100						
Wet film thickness	(Microns)	172	259	172						
Theoretical coverage.	m <sup>2</sup> / Liter	5.8	3.9	5.8						
	m <sup>2</sup> / Gallon	22.0	14.6	22.0						
Practical coverage.	m <sup>2</sup> / Liter	5.2	3.5	5.2						
	m <sup>2</sup> / Gallon	20.0	13.2	20.0						
	Remark : Actual Sur	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.					
		-	-		be coated.					
	method and techniq	ue; as well as t	he structure and di	mensions of the object to	be coated.					
Touch dry	method and techniq	ue; as well as t 25 °C	the structure and di 30 °C	mensions of the object to 35 °C	be coated.					
Touch dry	method and techniq Temperature Surface dry	ue; as well as t 25 °C 1 hr.	the structure and di 30 °C 45 mins	mensions of the object to 35 °C 30 mins	be coated.					
Recoat dry	method and techniq Temperature Surface dry Hard dry	ue; as well as t 25 °C 1 hr. 8 hrs.	the structure and di 30 °C 45 mins 6 hrs.	mensions of the object to 35 °C 30 mins 4 hrs.	be coated.					
	method and techniqu Temperature Surface dry Hard dry Minimum	ue; as well as t 25 °C 1 hr.	the structure and di 30 °C 45 mins	mensions of the object to 35 °C 30 mins	be coated.					
Recoat dry Full cure	method and techniqu Temperature Surface dry Hard dry Minimum Maximum	ue; as well as t 25 °C 1 hr. 8 hrs. 12 hrs. -	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. -	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. -	be coated.					
Recoat dry	method and techniqu Temperature Surface dry Hard dry Minimum Maximum	ue; as well as t 25 °C 1 hr. 8 hrs. 12 hrs. – 10 hrs.	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. – 8 hrs.	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs.						
Recoat dry Full cure	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time	ue; as well as t 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. -						
Recoat dry Full cure Potlife	method and techniqu Temperature Surface dry Hard dry Minimum Maximum	ue; as well as t 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs.						
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly.	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t	hickness and numb					
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs.						
Recoat dry Full cure Potlife	method and technique         Temperature         Surface dry         Hard dry         Minimum         Maximum         Remark : Drying time         of coats, and will be         Properties         Adhesion	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B	hickness and numb					
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time of coats, and will be Properties	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly.	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u>	hickness and numb					
Recoat dry Full cure Potlife	method and technique         Temperature         Surface dry         Hard dry         Minimum         Maximum         Remark : Drying time         of coats, and will be         Properties         Adhesion         Pencil Hardness         Flexibility	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circus spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B)	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm	hickness and numb					
Recoat dry Full cure Potlife	method and technique         Temperature         Surface dry         Hard dry         Minimum         Maximum         Remark : Drying time         of coats, and will be         Properties         Adhesion         Pencil Hardness	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H	hickness and numb Results Passed Passed					
Recoat dry Full cure Potlife	method and technique         Temperature         Surface dry         Hard dry         Minimum         Maximum         Remark : Drying time         of coats, and will be         Properties         Adhesion         Pencil Hardness         Flexibility	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B)	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm	hickness and numb Results Passed Passed Passed Passed					
Recoat dry Full cure Potlife	method and technique         Temperature         Surface dry         Hard dry         Minimum         Maximum         Remark : Drying time         of coats, and will be         Properties         Adhesion         Pencil Hardness         Flexibility	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D AS CS-17 Wheek AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B) TM D 4060 s, 1000 g load, 1000 cycles TM B 2794	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm 200 mg (loss) 60 inch-pounds	hickness and numb Results Passed Passed Passed Passed					
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time of coats, and will be Properties Adhesion Pencil Hardness Flexibility Abrasion Resistance	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D AS CS-17 Wheek AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circus spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B) TM D 4060 s, 1000 g load, 1000 cycles	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm 200 mg (loss)	hickness and numb Results Passed Passed Passed Passed Passed					
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time of coats, and will be Properties Adhesion Pencil Hardness Flexibility Abrasion Resistance	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D AS CS-17 Wheek AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B) TM D 4060 s, 1000 g load, 1000 cycles TM B 2794	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm 200 mg (loss) 60 inch-pounds	hickness and numb Results Passed Passed Passed Passed Passed Passed					
Recoat dry Full cure Potlife	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time of coats, and will be Properties Adhesion Pencil Hardness Flexibility Abrasion Resistance	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D CS-17 Wheek AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B) TM D 4060 s, 1000 g load, 1000 cycles TM B 2794	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm 200 mg (loss) 60 inch-pounds	hickness and numb Results Passed Passed Passed Passed Passed Passed					
Recoat dry Full cure	method and technique Temperature Surface dry Hard dry Minimum Maximum Remark : Drying time of coats, and will be Properties Adhesion Pencil Hardness Flexibility Abrasion Resistance Impact Test Salt Spray Resistance	ue; as well as 1 25 °C 1 hr. 8 hrs. 12 hrs. - 10 hrs. es are generall affected corre <u>Te</u> AS ASTM D AS CS-17 Wheek AS cs AS	the structure and di 30 °C 45 mins 6 hrs. 10 hrs. - 8 hrs. y related to air circu spondingly. <u>st Method</u> TM D 3359 TM D 3363 522 (Method B) TM D 4060 s, 1000 g load, 1000 cycles TM B 2794 TM B 117	mensions of the object to 35 °C 30 mins 4 hrs. 8 hrs. - 6 hrs. ulation, temperature, film t <u>Criteria</u> 5B H 3 mm 200 mg (loss) 60 inch-pounds 500 hrs.	hickness and numb Results Passed Passed Passed Passed Passed Passed					

**EPOGUARD PRIMER** 

# **Technical Data Sheet**



				Rev. 1 10/2017		
	Application Method	Airless Spra	ay Air Spray	Brush / Roller		
	Diluted by TOA Thinner 31	5-10	15-20	10-15		
	Applicator	Graco 419	(Iwata)	Short Hair Stiff Nylon Roller (Stanley)		
	Pressure	Graco 412 150-180 kg/c		Stiff Nylon Brush -		
	Pressure       150-180 kg/cm²       3-4 kg/cm²       -         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 Before Recoat by Topcoat	<ul> <li>Remover all oil, grease, dirt, oxide and other foreign material.</li> <li><u>High Quality</u></li> <li>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.</li> <li><u>Medium Quality</u></li> <li>Treatment by using Power tool cleaning in accordance with SIS St 3 or SSPC-SP3 .</li> <li><i>Remark</i>: The surface must be thoroughly dry and apply the protective coating within 4 hours to cleaned surface.</li> <li>Remover all oil, grease, dirt, oxide and other foreign material by cleaning per SSPC-SP1, Solvent Cleaning before coating.</li> <li>If over 7 days gives cleaning surface by sand paper no. 320-400 and cleaning surface per SSPC-SP1, Solvent Cleaning before coating.</li> <li>Surface repaire (cracks, pores, holes) done with TOA Epoxy putty and polishing of surface with moltoprene disk.</li> </ul>					
Coating System						
Protective Coating	: Primer Er	ooguard Primer	100 microns x 1 coat			
Flotective Coaling	: Topcoat Er (fc or Tc	ooguard Enamel or inside area)	50 microns x 2 coats 50 microns x 2 coats			
Recommendation	: The proper relative humidity in the work shall not exceed 85% RH. : 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.					
HANDLING AND STORAGE						
Storage condition	: 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.					
Shelf life	: 24 months at 30-35 °C					
Package	Packaging size 1 Gallon Set	Part A : 1 Gallon	Part B : 1/4 Gallon			

## **Technical Data Sheet**



Rev. 1 10/2017

#### HEALTH AND SAFETY

**EPOGUARD PRIMER** 

: 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.

: For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Safety Data Sheet.

#### DISCLAIMER

: 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.