

FEATURES	<p>: FIRESHIELD is a non-toxic, thin-film water-based intumescent coating. Upon exposure to flame or heat, it immediately foams and swell (Intumesces) providing an effective insulation and heat shield to protect the subsurface. As a finishing coat on exterior and interior of steel structure.</p> <p>: As an intermediate or topcoat for steel structure. It can be readily topcoated by many types of latex base paints, urethane, epoxy, long oil alkyd-based or acrylics for attractive weather resistant finishes.</p>
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TECHNICAL INFORMATION

Type	: Acrylic waterborne
Color	: White
Film Appearance	: Matt
Specific gravity	: 1.40 ± 0.05
Solid by volume	: 55 ± 2%
Flash point	: Non flammable

	No more than/ Coat				
Dry film thickness	(Microns)	500	1000	1500	2000
Wet film thickness	(Microns)	909	1818	2727	3636
Theoretical coverage.	m ² / Liter	1.1	0.6	0.4	0.3
	m ² / Gallon	4.2	2.1	1.4	1
Practical coverage.	m ² / 5 Gallon	21	10.5	7	5
	m ² / Liter	0.9	0.4	0.3	0.2
	m ² / Gallon	3.3	1.7	1.1	0.8
	m ² / 5 Gallon	16.5	8.5	5.5	4

Remark : Actual Surface coverage will depend on surface irregularities, Mixing, Application Condition methods and techniques as well as the structure and size of the object to be coated which the thickness of the paint film Each layer of film depends on Tools, Equipment, maybe cause to different film thicknesses.

Drying time (At dry film thickness 500 microns)	Temperature	25°C	30°C	35°C
Drying time	Surface dry	4 hrs.	3 hrs.	2 hrs.
Full cure	Hard dry	6 hrs.	5 hrs.	4 hrs.
Recoat dry	Minimum	6 hrs.	5 hrs.	4 hrs.
	Maximum	72 hrs.	72 hrs.	72 hrs.

Overcoating interval TOA FIRESHIELD	Minimum	Maximum
Overcoating interval between undercoat and topcoat	24 hrs.	72 hrs.

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

APPLICATION	Application Method	Airless Spray	Air Spray	Brush / Roller
	Diluted by	0-5%	5-10%	0-5%
	WATER			
	Applicator	Tipsize 621 Tipsize 623	Nozzle size 2.0 -2.5 mm	Long Hair Roller
	Pressure	150-180 Kg/cm ²	4-6 Kg/cm ²	-
	: Strictly before dilute by Water and stir for 2-3 mins until the mixture is homogeneous before application.			
	: Thinning must be avoided the product is supplied ready for use. Incorporation of water could result in film defects.			

APPLICATION SYSTEM

Surface Preparation

Steel

High Quality

- Remover all oil, grease, dirt, oxide and other foreign material.
- : 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.

Medium Quality

- : Treatment by using Power tool cleaning in accordance with SIS St 3 or SSPC-SP3 .
- Remark** : The surface must be thoroughly dry and apply the protective coating within 4 hours to cleaned surface.

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.

Coating System

Protective Coating

- : Primer Rustetch 100 microns x 1 coat
- : **Undercoat FireShield** **The thickness depends on the SPEC and customer demand**
- : Topcoat
- Epoguard Enamel (for inside area) 50 microns x 2 coat
- or
- Topguard (for outside area) 50 microns x 2 coat
(Need to Sand the film between Coat)

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.
- : **During the working period before and after spraying FireShield Should avoid drizzle or should work in a place with a back.**

Recommended

Primer

Topcoats

- : A wide range of single and two-pack primers has been tested satisfactorily.
- : It can be readily topcoated by many types of latex base paints, urethane, epoxy, long oil alkyd-based or acrylics for attractive weather resistant finishes.

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. Containers must be kept tightly closed.

Shelf life

12 months at 30-35°C

Package

Packaging size 1 Gallom 5 Gallom

HEALTH AND SAFETY

- : 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.