



Firetex FX5000

DATASHEET



Full Description	Firetex FX5000 Water Based Intumescent Coating.
Material Type	A water based TCEP free thin film intumescent coating.
Recommended Use	To provide up to 1 hours fire protection of structural steel, for use in dry internal areas only.
Endorsements	1998 Compliant – 1990 EPA-PG6/23(97) Clause 20(d) - Industrial
Recommended Application Methods	Airless spray Brush
Colour Availability	White.
Flash Point	Above 60°C
% Solids By Volume	70 ± 4% (ISO 3233:1998)
V.O.C.	55 grammes/litre.
Typical Thickness	See separate sheets of FX5000 loading requirements.

Practical Application Rate – microns per coat

	Airless Spray	Brush
Dry	1000*	300
Wet	1333	400

* Maximum sag tolerance with overlap typically 1250µm dry by airless spray.

Average Drying Times

	At 15°C	At 23°C
To Touch	3 hours	1 ½ hours
To Recoat	6 hours	4 hours
To Handle	This will depend on the total thickness of Firetex FX5000 to be applied.	

These figures are given as a guide only. Factors such as air movement and humidity must also be considered.

Recommended Thinner	Water.
Recommended Primers	A range of primers have been fire tested and approved for use under Firetex FX5000. Please consult Leigh's Customer Service Department for detailed information. Must not be applied directly to galvanised steel and zinc rich primers.



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Recommended Topcoats

If it can be guaranteed that application and subsequent in service conditions will be in a C1 environment as defined in ISO 12944-2:1998, then no topcoat is required.

For any other situation a sealercoat must be applied, consult Leigh's Customer Service Department for advice.

Enviroguard M770 is the recommended sealercoat and should be used for any subsequent redecoration.

Firetex M71 may be used in place of Enviroguard M770 if circumstances require it. Either coating should be applied within 7 days for best performance.

Bioguard M630V2 can be used for internal areas where regular water washing down for hygiene reasons is required. Maximum temperature of the water used should be no more than 60°C and water ponding on the coated steelwork must be avoided.

Package

A single component material.

Pack Size	20 litre units.
Weight	1.32 kg/litre.
Shelf Life	Minimum 6 months, protect from frost.

Surface Preparation

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

Application Equipment

Airless spray

Nozzle Size	0.43-0.53mm (17-21 thou)
Operating Pressure	315kg/cm ² (4500 psi)

Petrol Unit

Nozzle Size	0.43-0.53mm (17-21 thou)
Operating Pressure	210kg/cm ² (3000 psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip size, angle and operating pressure chosen. However, the operating pressure should be the lowest possible consistent with satisfactory atomisation. As conditions will vary from job to job, it is the applicators' responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt Leigh's Customer Service Department should be consulted.

Recommended equipment: Use 56:1 or 68:1 Graco King or equivalent. Use ³/₈" ID fluid line where lengths in excess of 10 feet required. In line gun or pump filters should not normally be used.

Brush

The material is suitable for brush application but due to the nature of the material a ribbed appearance will result. Application of more than one coat may be necessary to give equivalent dry film thickness to a single spray applied coat.



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Application Conditions And Overcoating

Firetex FX5000 must be applied in a dry internal environment. It must not be exposed to condensation, damp or wet conditions during or after application.

In conditions of high relative humidity good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying times will be significantly extended, and spraying characteristics may be impaired.

A minimum ambient air temperature of 5°C is required to ensure proper film formation.

Relative humidity should not exceed 80% to ensure proper film formation

No more than 2 coats by spray or 4 coats by brush in any 24 hour period.

Extended overcoating times may be required at low temperatures and/or high film thickness.

Occasionally impaired film formation such as cracking may occur on edges of flanges and external or internal angles of structural steel, depending on geometry, over-application and ambient conditions. This does not detrimentally affect the fire performance properties of the product.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Leigh's Customer Service Department.

Additional Notes

In common with other water based coatings, the drying of this material is retarded by high humidity conditions. Lack of air movement also slows down the drying process, and under such conditions it is advisable to introduce some method of circulating air over the coated surface in order to speed up the drying. A ventilated air speed of 2 metres per second is recommended.

Dry Film Thickness Measurement

All dft specifications quoted are mean values, measurements should be taken for I-sections to the following recommendations.

- Web – 2 per 50cm length.
- Flange – (upper, lower, inside and outside) – 1 per 50cm length.

High dft's and/or reduced temperatures will extend the drying time and hence the period when dft measurements can be carried out accurately.

For further information refer to Leigh's Customer Service Department.

Numerical values quoted for physical data may vary slightly from batch to batch.

Health And Safety

Consult Product Health and Safety Datasheet for information on safe handling and application of this product.

Unlike many other water based intumescent coatings, Firetex FX5000 does not contain tris-chloro ethyl phosphate (TCEP). TCEP is a category 3 carcinogen, which would cause products to be classified as harmful. Since FX5000 is TCEP free, it is not classified as harmful by the Chemicals (Hazard) Information and Packaging for Supply Regulations 2002.

The forgoing information is believed to be accurate at the time of preparation of this document, and is provided in good faith. However, no warranty or representation with respect to such information is intended of given.