



# FIRETEX FX5120

## PRODUCT TECHNICAL DATA

<b>FULL DESCRIPTION</b>	: FIRETEX FX5120 WATER BASED INTUMESCENT COATING												
<b>MATERIAL TYPE</b>	: A water based TCEP free thin film intumescent coating												
<b>RECOMMENDED USE</b>	: FIRETEX FX5120 is designed for application by airless spray, to provide fire resistance for periods of up to 120 minutes on structural steel. For use in internal dry controlled environments without topcoat (C1 according to ISO12944-2:1998) and internal semi controlled environments with topcoat (C2 according to ISO12944-2:1998)												
<b>ENDORSEMENTS:</b>	: Certifire Approved – Certificate CF5012. : This product has been assessed in accordance with the Criteria of Acceptability given in the ASFP/BCF “Industry Guidance document”. : This product has been tested and assessed in accordance with the ASFP fire testing protocol for cellular beam protection. See Section 6.3 from ASFP “Yellow Book” 4 <sup>th</sup> Edition. : Tested and assessed to EN 13381-8. : Tested to EN 13823 and EN 11925-2.												
<b>RECOMMENDED APPLICATION METHODS</b>	: Airless Spray : Brush												
<b>COLOUR AVAILABILITY</b>	: White												
<b>% SOLIDS BY VOLUME</b>	: 69 ± 3% (ASTM-D2697-91)												
<b>V.O.C.</b>	: 3.35 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive : 2.41 gms/kilo content by weight from formulation, to satisfy EC SED												
<b>PRACTICAL APPLICATION RATES- microns per coat</b>	: <table border="1"><thead><tr><th></th><th><b>Airless Spray</b></th><th><b>Brush</b></th></tr></thead><tbody><tr><td>: Dry</td><td>1000*</td><td>300</td></tr><tr><td>: Wet</td><td>1400</td><td>441</td></tr></tbody></table> * Maximum sag tolerance typically 1800µm wet by airless spray.		<b>Airless Spray</b>	<b>Brush</b>	: Dry	1000*	300	: Wet	1400	441			
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<b>RECOMMENDED THINNER</b>	: Water – Thinning will have an adverse effect on sag tolerance.												
<b>RECOMMENDED PRIMERS</b>	: A range of primers have been fire tested and approved for use under FIRETEX FX5120. : Please consult Sherwin-Williams Customer Service Department for detailed information. : <b>Must not be applied directly to galvanized steel and zinc rich primers.</b>												
<b>RECOMMENDED TOPCOATS</b>	: <b>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.</b> : For any other situation a topcoat must be applied, consult Sherwin-Williams for advice. : Envirogard M770 : FIRETEX M71V3 : Resistex C137V2 or C237 : The above products should be used for subsequent re-decoration.												
<b>PACKAGE</b>	: Single component material												
<b>Pack Size</b>	: 20 litre units												
<b>Weight</b>	: 1.39 kg/litre												
<b>Shelf Life</b>	: 10 months from date of manufacture. This is designated by the “Use by” date on the pail. Long term storage of the product must be in a covered environment out of direct sunlight and in the temperature range 5° to 35°C.												

## **SURFACE PREPARATION:**

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

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## **APPLICATION EQUIPMENT:**

### **Airless Spray**

Nozzle Size: 19-23 thou  
Depending on application requirements

Operating Pressure: 175kg/cm<sup>2</sup> (2500 psi)

### **Petrol Unit**

Nozzle Size : 19-23 thou depending on application requirements

Operating Pressure: 175kg/cm<sup>2</sup> (2500 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 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 applicator's responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt Sherwin-Williams should be consulted.

Use  $\frac{3}{8}$ " ID fluid line where lengths in excess of 10 feet are 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 applied coat.

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## **APPLICATION CONDITIONS AND OVERCOATING:**

**FIRETEX FX5120 must be applied in a dry 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.

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

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

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

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

Application may be undertaken outdoors in environments which can be guaranteed to be dry, and offer suitable temperature and humidity conditions for the coatings to dry.

Under these external application conditions, sufficient measures shall be taken to protect the coatings from contaminants such as dust, sand, moisture etc during the drying process.

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.

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

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## **HEALTH AND SAFETY:**

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

Unlike many other water based intumescent coatings, FIRETEX FX5120 does not contain tris-chloro ethyl phosphate ( TCEP ).

TCEP is a category 3 carcinogen, which would cause products to be classified as harmful. Since FIRETEX FX5120 is TCEP free, it is not classified as harmful by the Chemicals (Hazard) Information and Packaging for Supply Regulations 2002.

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Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.