Protective & Marine Coatings

FIRETEX® FX5090
WATER BASED INTUMESCENT

Revised 11/2016 Issue 8

PRODUCT INFORMATION

PRODUCT DESCRIPTION

A water based TCEP free thin film intumescent coating

RECOMMENDED USE

FIRETEX FX5090 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 external urban or uncontrolled internal environments with topcoat (C3 according to ISO12944-2:1998).

ENDORSEMENTS

Certifire Approved – Certificate CF5188
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 4.1 from ASFP "Yellow Book" 5th Edition.

Tested and assessed to EN13381-8.
European Technical Assessment ETA-15-0486.
CE Mark Number: 1121-CPR-GA5024.

RECOMMENDED APPLICATION METHODS

Airless Spray
Brush

Recommended Thinner: Water - See Additional Notes

PRODUCT CHARACTERISTICS

% Solids by Volume: 69 ± 3% (ASTM-D2697-91)

Colour Availability: White

VOC
0.19 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive
0.13 gms/kilo content by weight from formulation, to satisfy EC Solvent Emissions Directive

RECOMMENDED THICKNESS

See separate sheet of FX5090 loading requirements.

PRACTICAL APPLICATION RATES - MICRONS PER COAT

	Airless Spray	Brush
Dry	1000*	300
Wet	1450	435

* Maximum sag tolerance typically 1800µm wet (1242µm dry) by airless spray.

AVERAGE DRYING TIMES

	@ 15°C	@ 23°C
To touch:	3 hours	1½ hours
To recoat:	6 hours	4 hours
To handle:	This will depend on the total thickness of FIRETEX FX5090 to be applied.	

No more than two coats by airless spray should be applied within any 24 hour period

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

RECOMMENDED PRIMERS

A range of primers have been fire tested and approved for use under FIRETEX FX5090.
Please consult Sherwin-Williams for detailed information.
Must not be applied directly to galvanized steel and zinc rich primers.

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 topcoat must be applied, consult Sherwin-Williams for advice.

Sher-Cryl M770
FIRETEX M71V2,
Acrolon C137V2 or Acrolon C237
The above products should be used for subsequent re-decoration.

PACKAGE

A single component material

Pack Size:	20 litre units
Weight:	1.40 kg/litre
Shelf Life:	6 months from date of manufacture or 'Use By' date where specified. Protect from frost.

This Data Sheet is specifically subject to the disclaimer which can be found at http://protectiveemea.sherwin-williams.com/Home/Disclaimer"

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SURFACE PREPARATION

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

APPLICATION EQUIPMENT

Airless Spray

Nozzle Size:	19 - 21 thou depending on application requirements
Operating Pressure:	175kg/cm² (2500 psi)

Petrol Unit:

Nozzle Size:	19 - 21 thou depending on application requirements
Operating Pressure:	175kg/cm² (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 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.

APPLICATION CONDITIONS AND OVERCOATING

FIRETEX FX5090 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 shall be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing 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.

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

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 Sherwin-Williams.

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.

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 FX5090 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 FX5090 is TCEP free, it is not classified as harmful by the Chemicals (Hazard) Information and Packaging for Supply Regulations 2002.

WARRANTY

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.

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