

PRODUCT DESCRIPTION

SINGLE COMPONENT WATERBORNE THIN FILM INTUMESCENT COATING

COPON PYROTECH SPX 90 has been specifically developed to provide enhanced fire resistance to structural steel sections for up to 90 minutes duration.

COPON PYROTECH SPX 90 has been formulated to enable the application of appropriate film builds in single or multicoat application, thus significantly reducing the total time and manpower to apply the entire coating system as specified.

COPON PYROTECH SPX 90 is a genuine waterborne intumescent and is therefore safe to store, handle and apply and eliminates traditional health hazards during normal use.

COPON PYROTECH SPX 90 is designed for use in enclosed internal conditions. Where COPON PYROTECH SPX 90 could be exposed to moisture COPON PYROSEAL should be applied as a protective sealer coat (refer to System Recommendation Manual for details).

FIRE RESISTANCE PERFORMANCE

Tested and assessed in full compliance with the ICF Industry Guidance Document and Section 5 of the Yellow Book.

All data derived from BS476 test evidence.

Loading tables detailing the required thicknesses of product to provide a specified performance for a given steel section size are available from the E Wood Technical Centre.

PHYSICAL CONSTANTS

Total Solid Content (Average) by Volume	65%
V.O.C.	Nil
Film Thickness	Refer to product loading tables in System Recommendation Manual.
Theoretical Coverage Rate	0.65 m ² per litre at 1mm dft 1.30 m ² per litre at 500 microns dft.

SURFACE PREPARATION AND PRIMING

The steel surface should be abrasive blast cleaned to a minimum standard Sa21/2 in accordance with BS 7079: Part A1 (1989), with a mean surface profile of 30-60 microns. All surfaces should be dry and free from dust, grease and other contaminants.

Within 4 hours of blast cleaning, the prepared surface should be coated with an appropriate primer to provide the required long term corrosion resistance. A variety of two component epoxy and single component alkyd primers are suitable. Appropriate two component COPON Primers include COPON EA3, COPON EA9, COPON EA9 Holding Primer and COPON HYCOTE EA9WB. Advice regarding the suitability of alternative single and two component primers should be sought from the E Wood Technical Centre.

APPLICATION

Intumescent fire protection products are high technology products and should be applied by competent, skilled applicators in accordance with the following instructions.

Application Conditions

COPON PYROTECH SPX 90 should not be applied when the relative humidity exceeds 80% or the surface to be coated is less than 3°C above the dewpoint. The product should not be applied at temperatures below 7°C.

Application Equipment

The preferred method of application is via standard airless spray equipment giving a pressure at the tip of 1500-2500psi. Appropriate spray tip sizes are normally in the range of 0.021" - 0.027" , however, the optimum tip size/fan angle will be determined by the geometry of the steel section(s) being coated.

An inline filter of no finer than 30 mesh is recommended.

The Copon Technical Service Department should be consulted where alternative equipment is being considered.

Note: Ideally dedicated spray equipment should be used for applying waterborne coatings. If this is not possible, equipment should be first flushed with a solvent related to the previous solvent based coating. This should then be followed by a second flushing using COPON 3000 CLEANING SOLVENT water miscible solvent, then by rinsing through with clean water. After use, wash out with clean water followed by flushing with COPON 3000 CLEANING SOLVENT.

Coating Thickness

COPON PYROTECH SPX 90 has been specifically formulated so that the full range of required product loading can be readily attained in a single or two coat airless spray application.

COPON PYROTECH SPX 90 may be applied by brush. However in order to ensure an even coating thickness is obtained, the desired thickness should be achieved by the application of successive coats of no more than 300 microns dft (460 microns wft) per coat.

The completed dry film thickness should be checked to ensure the required thickness has been applied.

Overcoating Intervals

Where multiple coats of COPON PYROTECH SPX 90 are required to achieve the prescribed dry film thickness, adequate drying time between the coats should be allowed. At 20°C, the minimum overcoating time is typically 4-6 hours. However, this time will vary considerably depending upon the prevailing temperature, relative humidity, air movement and thickness of material applied. Provided the surface is dry and free from contaminants, the maximum overcoating period is indefinite.

DRYING & CURE TIMES AT 20°C

Touch Dry	4-6 hours
Hard Dry to Handle	approx 12 hours depending on thicknesses
Full Cure	7 days
Minimum Overcoating	4-6 hours

Note: All times will vary depending on drying conditions and applied thicknesses.

HEALTH AND SAFETY

1. COPON PYROTECH SPX 90 is a waterborne system and does not present any health hazard during normal industrial use.
2. Adequate ventilation must be provided in confined areas, for spray application appropriate masks should be worn.
3. Contact with the skin should be avoided.

NOTE: Full Health and Safety Data is available from E Wood Ltd.

PACKAGING & STORAGE

Supplied in 20 litre units.

Use within 6 months of purchase. Store in original sealed containers at temperatures between 5°C and 30°C.

ALWAYS PROTECT FROM FROST DURING STORAGE AND USE.

Copon System Recommendations take precedence over individual Copon product data sheets and are available on request.



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