# **Product Information**

## Description

SC801-120 Intumescent Basecoat is a water-based, white, thin film intumescent coating for the protection of internal structural steelwork.

## Usage / Purpose

SC801-120 provides up to 120 minutes fire resistance to 'l' section beams, columns, hollow section columns and cellular beams.

### Finish

SC801-120 can be applied to a smooth matt finish. A compatible top-seal can be applied if a decorative finish is required.

Colour White

Packaging Supplied in 25 kg drums

### **Environmental Considerations**

Very low VOC. Contains no substances of very high concern.

# Availability

Only available via Nullifire Specialist Contractors or direct from Tremco CPG UK Limited (see details on this TDS).

# **Usage Guidelines**

# **Protective Equipment**

USE IN WELL VENTILATED CONDITIONS and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

# **Substrate Preparation**

- SC801 should be applied onto a clean, undamaged and dry primed surface.
- Nullifire recommended primers are listed on the ETA and Nullifire's website
- Nullifire have carried out compatibility testing on a wide range of primers and topcoats and can be contacted on +44 (0)203 917177 for confirmation of compatibility with SC804.
- The primer must be applied in accordance with the manufacturer's instructions.

### **Application Conditions**

- Nullifire SC801-120 is recommended for application and use on dry protected structural steel only.
- If the basecoat is allowed to get wet, it is likely to be damaged – blistering and wrinkling may occur.
- SC801-120 should only be applied when the air and steel temperatures are above 5°C. Relative humidity should be below 80% for successful application. Steel surface temperature should be a minimum of 3°C above the dew point.
- Ensure the steel is dry and free from contact with rain or condensation during the application and drying of SC801-120.

# **Application Equipment**

Airless spray equipment is recommended and should match these guidelines: Operating Pressure: 2500- 3000psi (175-210 kg/cm<sup>2</sup>) Tip Size: 19 – 21 thou Fan Angle: 20° – 40° Hose Diameter: 10 mm (3/8″) (internal diameter) Hose Length: Max. 60 metres, in-line filters should not normally be used.

# Mixing

SC801-120 is supplied ready for use and must not be thinned but should be mechanically stirred prior to use.

# Application

AIRLESS SPRAYING

 SC801-120 may be applied up to a maximum wet film thickness (WFT) of 1.2 mm in a single spray coat comprising of several quick passes. Achieving maximum loadings will depend on site conditions.

**BRUSH/ROLLER APPLICATION** 

- For brush application use a "laying on" technique to avoid heavy brush marking.
- Maximum wet film per coat when applied using a brush or roller is 0.6 mm.
  A short piled roller will produce a light textured finish.
- During application, measure the wet film thickness frequently with the WFT gauge provided to ensure the correct thickness is being applied.
- To use the gauge, insert the teeth into the wet basecoat. The last tooth to be coated indicates the wet film thickness achieved.
- In the event of over or under applications, adjustments to the loading rates of subsequent coats will be required.



**SC80** 

Intumescent Basecoat On-Site, Water-Based





# **Key Benefits Summary**

- Water based intumescent coating suitable for internal use on structural steelwork for up to 120 minute fire resistance
- Easier to apply product for greater efficency on site with improved smooth matt finish
- Compatible with a full range of Nullifire primers and top seals
- Very low VOC





# **SC80** Intumescent Basecoat



## **Drying Times**

	Temperature		
WFT	10°C	20°C	30°C
0.7 mm	4 h	2 h	1.5 h
1.0 mm	5 h	4 h	3 h
1.2 mm	8 h	6 h	4 h

These are times for a typical mid-range humidity and good air flow. Higher humidity, poor airflow or overnight condensation will all lengthen these times. Do not over coat if the surface is not touch dry. Check web-flange joints.

### **Application Advice**

The following instructions are for on-site application only. For off-site application, refer to Nullifire. Ensure that:

- The primer is compatible with SC801-120 and has been applied correctly.
- The overcoating period for the primer has not been exceeded.
- The correct primer is used for galvanised steel.
- All damage to the primer has been repaired & re-primed.
- Site and weather conditions are within specification.
- S801-120 has been stored correctly.
- Surface is clean, dry and free from contamination.
- Correct spray equipment is available, if appropriate.
- Application instructions have been read prior to commencement of work.
- Ensure different basecoats are not applied on the same section of steel.
- Equipment should be clean and free from contaminants or dried material.
- Wet film gauges are available for use.

### Cleaning

Spray equipment can be cleaned using water only.

### **Top Seal Requirements**

Once DFT's have been achieved as specified, a Nullifire top seal can be applied. Ensure the SC801 is completely dry before applying top seal. For approved top seals, please consult Nullifire's Approved Topcoat List.

# **Technical Data**

Property	Result	
Composition	A very low VOC, water-based formulation	
	Certifire CF5365 , BS476 Part 21: 1987, Cellular	
Certification	Beams YB5	
	(for other certification requirements, contact Nullifire)	
	C1, C2 and C3 environments.	
Building Classification	For full details, please consult Nullifire Specification Guidelines.	
Properties (Typical Values)		
Specific Gravity	1.38 ±0.02	
Volume Solids	68% ±3%	
VOC	< 0.5 g/l	
Theoretical Coverage	2,050 g/m² based on an applied 1.00 mm dry film thickness	
Storage	Store in secure, dry warehouse conditions between +5°C and +35°C	
Shelf Life (at +20°C)	6 months when stored as recommended in original unopened container	

## Maintenance & Repair

Damaged areas should be abraded back to a sound surface. The surface should then be clean and dry before re-applying. FC101 Filler may be used for repairing scratches and chips. Once repaired topseal should be re-applied. Refer to Nullifire Maintenance Instructions.

#### Specification

ATremco CPG UK Limited Representative will provide a specification for each project. Tremco CPG UK Limited accepts no responsibility for defects arising from failure to follow the specification.

# **Health & Safety Precautions**

Safety data sheet must be read and understood before use.

### **Technical Service**

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01322 551010.

#### Guarantee / Warranty

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge. No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.



Tremco CPG UK Limited Coupland Rd, Hindley Green Wigan WN2 4HT UK Tel: +44 (0)1942 251400 Customer Service Unit: +44 (0)1322 551010 Technical Hub: +44 (0)20 3917 1776