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CAW G12		
Uniclass JM61:L68116		

# Nullifire

## Smart Protection

### 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 can provide up to 120 minutes fire resistance.

#### 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 Nullifire (see back of leaflet for address and telephone details).

### Usage Guidelines

#### Surface Preparation & Priming

- SC801-120 should be applied onto a clean, undamaged, dry and primed steel surface.
- Certain types of primers can cause char adhesion problems in a fire. In particular, thermoplastic primers must be avoided.
- Nullifire recommend and have tested PM015, PM019 and PM020 primers- see website for details.
- Nullifire have carried out compatibility testing on a wide range of primers and can be contacted on +44 (0) 24 7685 5000 for confirmation of compatibility with SC801-120.
- SC801-120 should not be applied directly to galvanised surfaces or zinc rich primer.
- The primer must be applied in accordance with the manufacturer's instructions.
- Nullifire should be consulted for technical advice when zinc rich

primers or the overcoating of existing paints are specified for use.

#### 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.
- Build up thickness to achieve loading required in several quick passes. It may be possible to apply two coats of SC801-120 in one day particularly if the atmospheric temperature is above 20°C and relative humidity below 70%. However, before doing this, ensure that the previously applied coat is dry, particularly in the web/flange junctions.

##### BRUSH/ROLLER APPLICATION

- For brush application use a "laying

# SC801

## 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 efficiency on site with improved smooth matt finish
- Compatible with a full range of Nullifire primers and top seals
- Very low VOC



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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.

### Drying Times

WFT	Temperature		
	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



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### Technical Data

Property	Result
Composition	A very low VOC, water-based formulation
Certification	BS476 Part 21: 1987
Building Classification	C1 and C2 environments
<b>Properties (Typical Values)</b>	
Specific Gravity	1.38 ±0.02
Volume Solids	68% ±3%
VOC	1 g/l
Viscosity	150- 200 Poise (Spindle 6 @20 rpm)
Theoretical Coverage	2,050 g/m <sup>2</sup> 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	6 months when stored as recommended in original unopened container

- 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: TS134 (acrylic polymer), TS815 (modified acrylic) or TS816 (water-based acrylic), can be applied. Ensure the SC801-120 is completely dry before applying top seal.

### 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

A tremco illbruck Representative will provide a specification for each project. tremco illbruck 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 illbruck 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 01942 251400.

### Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco illbruck written instructions and (b) in any application recommended by tremco illbruck, 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 illbruck Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.