

# Intumescent Coatings

Product Catalogue





## Intelligent Engineered Passive Fire Protection

**We are specialists, with one focus that has not and will not change – to protect people and buildings from fire. For over 40 years, Nullifire has been a market leader in intumescent and fire stopping solutions.**

Passive fire protection is highly complex but crucially important, especially as buildings become more sophisticated. At Nullifire, we understand the need to have confidence in fire protection; so, we provide systems that perform when they are called upon.

With a unique team of technical experts, everything is focused on providing what our customers need at every stage of their project – smart protection.

Nullifire is a brand of Tremco Construction Products Group, a global manufacturer and service provider of high performance building materials.

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## Assistance When Required

**Our targeted approach allows you to access answers to all of your questions - quickly, simply and for every phase of your project.**

Regardless of the complexity of a project, you can turn to the team here at Nullifire. Our trained expert team support architects, specifiers, main contractors and installers in product selection, specification writing and industry best practices. Involving us at the early stages of a project can help you save money and time, as well as the assurance that the products selected are fully compatible and ideal for the job at hand.

Whilst choosing the right product is vitally important, the application is equally as critical. Our extensive range of training ensures Nullifire products are applied professionally and efficiently, whilst giving installers and contractors access to new technologies and solutions.

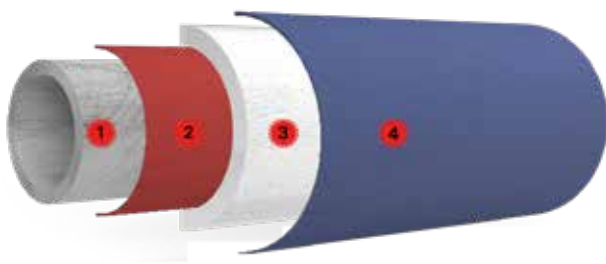
For more information, visit [www.tremcocpg-asiapacific.com](http://www.tremcocpg-asiapacific.com)

# Complete Smart Solutions

## Smartly Designed Solutions

Products engineered for compatibility, the Nullifire intumescent coatings range is designed to provide a complete system for fire protection and decoration of structural steel.

Minimising the risk of problems occurring on site, we can assure you that when using a complete Nullifire solution, you will achieve the desired look, feel and protection for the project.



1. Steel Section
2. Compatible Nullifire Primer
3. Compatible Nullifire Intumescent Coating
4. Compatible Nullifire Top Seal

### 1. Steel Section

Our range of intumescent coatings, top seals and primers can be used on a mixture of steel sections and are suitable for areas up to C5. For more specific enquiries, please refer to the technical data sheets, loading tables and/or a member of the technical team.

### 2. Primer

Inhibits corrosion of the underlying structural steel. Primers also provide a key for the intumescent coatings. If using SC902, primers may not be required (contact our technical services department for more information, prior to use)

### 3. Intumescent Coating

The intumescent coating is applied to the correct thickness to provide the specified level. Please contact our technical services department for intumescent thickness calculation.

### 4. Top Seal

A smooth hard wearing finish to seal the intumescent coating, which protects from the impact of weather. The decorative aspect of the top seal provides an aesthetically attractive appearance.

It is recommended that Nullifire primers, intumescent coatings and top seals are applied by experienced specialists. Full details of our recognised contractors can be obtained by contacting us, or visiting [www.tremcocpg-asiapacific.com](http://www.tremcocpg-asiapacific.com)

## The Faster Way to The Smarter Solution

Quickly identify the right product for the project.

This selector provides an at-a-glance overview of the complete Nullifire steel protection range. Before referring to more detailed information about each product, use the selector to:

- Review and compare products and their specific functions
- Find suitable products for specific applications
- Always check the product application or technical data sheet for specific guidance and instructions.

Exposure Scenario		Water Based Intumescent				Solvent Based Intumescent		Hybrid Intumescent
ISO 12944	ETAG	SC801	SC802	SC803	SC804	SC601	SC602	SC902
C1	Z2	✓	✓	✓	✓	✓	✓	✓
C2	Z1/Y	✓	✓	✓	✓	✓	✓	✓
C3	Y/X	✓	✓	✓	✓	✓	✓	✓
C4	X	X	X	X	X	✓	✓	✓
C5	n/a	X	X	X	X	X	X	✓
6 month (maximum semi-exposed)		Topcoat required	Topcoat required	Topcoat required	No topcoat required (3 months maximum)	No topcoat required	No topcoat required	No topcoat required



# Product Suitability

## Smartly Designed Solutions

Nullifire products listed are suitable for areas up to C5. For project specific enquiries, please contact us for technical advice. Remember that many projects could have a mixture of classification environments, which have to be considered independently.

### C1: Very Low Corrosion Risk

**Interior:**

Heated buildings with clean atmospheres (e.g. offices, shops, schools and hotels)

**Exteriors:**

n/a

### C2: Low Corrosion Risk

**Interior:**

Unheated buildings where condensation may occur (e.g. depots, sports halls etc)

**Exteriors:**

Atmospheres with low level of pollution. Mostly rural areas.

### C3: Medium Corrosion Risk

**Interior:**

Production rooms with high humidity and some air pollution (e.g. food processing plants, laundries, breweries etc.)

**Exteriors:**

Urban and industrial atmospheres, moderate sulphur dioxide pollution, coastal areas with low salinity.

### C4: High Corrosion Risk

**Interior:**

Chemical plants, swimming pools coastal ships and boatyards.

**Exteriors:**

Industrial areas and coastal areas with moderate salinity.

### C5: Very High Corrosion Risk

**Interior:**

Buildings or areas with almost permanent condensation and with high pollution.

**Exteriors:**

Industrial areas with high humidity and aggressive atmosphere.



# Fast Track, High Build Solutions

## One-Coat Protection

SC902 is an innovative patented intumescent coating delivering ground breaking performance for the protection of internal, semi-exposed, and external steelwork. Suitable for both on-site and off-site work.

Exposure Scenario		Hybrid Intumescent
ISO 12944	ETAG	SC902
C1	Z2	✓
C2	Z1/Y	✓
C3	Y/X	✓
C4	X	✓
C5	n/a	✓
6 month (Maximum semi-exposed)		No topcoat required



## SC902

### Fast Track Intumescent Coating

#### Product Overview

SC902 is a fast-track, on-site, low VOC, one-coat, high-build system, based on patented technology. Designed to provide up to 120 minutes fire resistance to "I" section beams, columns, hollow columns and cellular beams.

#### Advantages at a glance:

- Fire rating up to 120 minutes tested to BS476 and EN13381: Part 8
- Fast cure: early weather resistance , shower proof within 1 hour.
- Achieves external durability with an approved top seal
- Cures below 0°C and fully dry by the following day
- Self-priming system, up to 2 weeks post blasting
- High-build potential with all rating possible in one application.

#### Properties (typical values)

Specific gravity	Part A: 1.55 ±0.02, Part B: 0.99 ±0.01, Mixed: 1.46 ±0.02
Volume solids	85% ±3%
VOC	137 g/l
Viscosity	Part A: 140 ±20 Poise (Spindle 7 @50 rpm) Part B: 10 ±1 Poise (Spindle 7 @50 rpm) Mixed: 80 ±10 Poise (Spindle 7 @50 rpm)
Mix ratio	By weight 100:12, by volume 5.6:1
Pot life	Minimum 60 minutes
Theoretical coverage	1,750 g/m <sup>2</sup> based on applied 1.00 mm dry film thickness
Storage	Store in secure, dry warehouse conditions between +5°C and +35°C
Shelf life	12 months when stored as recommended in original unopened container.



# Water-Based Solutions

## Economical & Versatile

Nullifire water-based solutions offer safe, fast and economical fire protection for internal steelwork. Nullifire pioneered water-based technology and offer a fully comprehensive range.

Exposure Scenario		Water Based Intumescent			
ISO 12944	ETAG	SC801	SC802	SC803	SC804
C1	Z2	✓	✓	✓	✓
C2	Z1/Y	✓	✓	✓	✓
C3	Y/X	✓	✓	✓	✓
C4	X	X	X	X	X
C5	n/a	X	X	X	X
6 month (maximum semi-exposed)		Topcoat required	Topcoat required	Topcoat required	No topcoat required (3 months maximum)



### SC801 Intumescent Coating

#### Product Overview

SC801 Intumescent Coating is a water-based, white, thin film, intumescent coating for the protection of internal structural steelwork. Optimised to provide up to 120 minutes fire resistance to "I" section beams, columns, hollow tube columns and cellular beams.

#### Advantages at a glance:

- 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
- Low odour and very low VOC

Properties (typical values)	
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 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



### SC802 Intumescent Coating

#### Product Overview

SC802 is a water-based, single pack product. SC802 offers the optimum mix of economic, environmental, aesthetic and practical benefits. Optimised to provide 60 minutes fire resistance to "I" section beams, columns, hollow columns, beams and circular beams.

#### Advantages at a glance:

- Most competitive "all-round" 60 minute water-based product
- Easy to spray product to reduce downtime and potential difficulties on site
- Gives an outstanding smooth, matt finish
- Outstanding adhesion and durability
- Water-based technology

Properties (typical values)	
Specific gravity	138 ± 0.02
Volume solids	70% ± 2%
VOC	6 g/l
Viscosity	150-200 Poise (Spindle 6 @ 20 rpm)
Theoretical coverage	1,000 g/m <sup>2</sup> based on applied 0.5 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



## SC803

### Intumescent Coating

#### Product Overview

SC803 Intumescent Coating is a water-based, white, thin film intumescent coating for the protection of internal structural steelwork. Optimised to provide 60 minutes fire resistance to "I" section beams, columns, hollow columns and hollow beams. Limited 90 minute protection is also available.

#### Advantages at a glance:

- Ultra low VOC
- Market leading loadings
- Compatible with a wide range of primers and topcoats
- Easy to apply

Properties (typical values)	
Specific gravity	1.38 ± 0.02
Volume solids	69% ± 3%
VOC	0.5 g/l
Theoretical coverage	1,000 g/m <sup>2</sup> based on applied 0.5 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



## SC804

### Intumescent Coating

#### Product Overview

SC804 is a water-based, white, thin film intumescent coating for the protection of internal structural steelwork. It was developed to give optimised loadings for 90 minutes, and up to 120 minutes fire resistance.

#### Advantages at a glance:

- Ultra Low VOC
- Competitive Loadings
- Compatible with a wide range of primers and topcoats
- Excellent aesthetics

Properties (typical values)	
Specific gravity	1.38 ± 0.02
Volume solids	69% ± 3%
VOC	0.5 g/l
Theoretical coverage	1,000 g/m <sup>2</sup> based on applied 0.5 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



# Solvent Based Solutions

## Proven Protection

Nullifire solvent-based products offer fast applied robust fire protection for structural steelwork. These products also offer a more robust environmental tolerance and resistance as well as a decorative finish, and are suitable for on-site or off-site application.

Exposure Scenario		Solvent Based Intumescent	
ISO 12944	ETAG	SC601	SC602
C1	Z2	✓	✓
C2	Z1/Y	✓	✓
C3	Y/X	✓	✓
C4	X	✓	✓
C5	n/a	X	X
6 month (maximum semi-exposed)		No topcoat required	No topcoat required



### SC601 Intumescent Coating

#### Product Overview

SC601 is a single pack acrylic thin film intumescent coating for the protection of internal and semi-exposed structural steelwork. SC601 is optimised to provide 60 minutes fire resistance to "I" section beams & columns, hollow beams & columns, as well as cellular beams. SC601 also provides 90 minute fire resistance and limited 120 minute protection.

#### Advantages at a glance:

- Competitive loadings
- Compatible with various primers and topcoats
- Easy to apply by airless spray, optimised to provide fire protection for 60 minutes as well as limited range of sections for longer protection times
- Suitable for off-site application

Properties (typical values)	
Specific gravity	1.36 ± 0.02
Volume solids	72% ± 2%
VOC	317 g/l
Consumption	670 g/m <sup>2</sup> @ 0.6mm DFT
Storage	Store in secure, dry warehouse conditions between +0°C and +35°C
Shelf life	12 months when stored as recommended in original unopened container



### SC602 Intumescent Coating

#### Product Overview

SC602 is a single pack acrylic thin film intumescent coating for the protection of internal and semi-exposed structural steelwork. SC602 is optimised to provide 60 minutes fire resistance to "I" section beams & columns, hollow beams & columns, as well as cellular beams. SC602 also provides 90 minutes fire resistance and limited 120 minute protection.

#### Advantages at a glance:

- Competitive loadings
- Compatible with various primers and topcoats
- Easy to apply by airless spray, optimised to provide fire protection for 60 minutes as well as a limited range of sections for longer protection times
- Suitable for on-site application

Properties (typical values)	
Specific gravity	1.36 ± 0.02
Volume solids	72% ± 2%
VOC	317 g/l
Consumption	670 g/m <sup>2</sup> @ 0.55 DFT
Storage	Store in secure, dry warehouse conditions between +0°C and +35°C
Shelf life	12 months when stored as recommended in original unopened container



# Certification and Accreditation

**Nullifire's passive fire protection solutions have been tested to many of the latest International standards, providing the highest levels of certification. Installing Nullifire products will provide a system that is not only fit for purpose today, but will meet changing legislation in the future.**



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



## Part of Tremco CPG APAC



**We know that the success of a construction project relies on more than the products that are used, as it takes a lot of skill, knowledge, understanding, and expertise to ensure that those products are applied in the best way possible.**

At Tremco Construction Products Group (CPG), we're committed to shaping the future through innovative approaches and sustainable solutions.

This commitment is backed up by the fact that we bring together first-class technology with a customer-focused approach, along with skills that have been built up over multiple decades within very specialised fields across Asia Pacific, to provide a truly unique service.

From joint sealing, façade bonding and insulation through to passive fire protection, performance resin flooring, waterproofing, and roofing solutions — our broad range makes us the ideal partner to solve the complex challenges faced by today's architects, contractors, developers, and trades.

With expertise in a range of product technologies, Tremco CPG provides solutions to help you engineer structures that are more efficient to build and maintain, are virtually impervious to the elements, and can provide a multitude of finishes.

Our brands include Tremco, Dryvit, NewBrick, Nudura, Willseal, Flowcrete, illbruck, Nullifire, Vandex, and Euclid Chemical.

 **TREMCO**  **Dryvit**  **NewBrick**  **Nudura**  **Willseal**

**Flowcrete**  
for the world at your feet

 **illbruck**

**Nullifire**

**Vandex**



# ***Nullifire***

***Smart Protection***

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