Nullifire
Smart Protection

SC902

Intumescent Steel Coating
Fast Track, On-Site

up to **120** mins

Product Information

Description
SC902 is a low VOC, one coat, high build system, based on patented technology.

Usage / Purpose
It provides a fast cure effective structural fire performance, for steelwork, up to a 120 minute fire rating.

Finish
Can be applied to a smooth matt finish. A compatible top seal can be applied if a decorative finish is required.

Colour
Part A: White
Part B: Translucent Black
Mixed: Off-white
Cured: Off-white

Packaging
Part A 22.3 kg pail
Part B 2.7 kg tin

Environmental Considerations
Low VOC and no solvent entrapment or prolonged solvent odour.

Availability
Only available to Nullifire Specialist Contractors direct from Nullifire (see back of leaflet for address and telephone details).

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.

Surface Preparation & Priming
- No primer required for C1 or C2 environments.
- Steelwork should be blast cleaned in dry atmospheric conditions using abrasive of suitable type and size, free from fines, moisture and oil. Continue blasting until finish complies with Swedish Standard SIS 05 59 00, preparation grade SA 2.5 or ISO 8501-1.

- Coat blasted steel within 2 weeks. All surfaces to be coated should be clean, dry and free from loose friable materials and any other contaminants likely to impair adhesion.
- Nullifire recommends and have tested a number of primers depending on the application. Refer to the Approved Primer list from Nullifire Technical Services.
- The system is not suitable for use over single pack primers and compatibility with 2 pack primers should be checked with Nullifire Technical Services.
- For use over galvanised surfaces or other substrates please contact Nullifire Technical Services.

Application Conditions
- Ensure adequate through ventilation during application
- Application temperature range -5°C to +35°C, relative humidity <95% and a steel surface temperature at least 3°C above the dew point.

Application Equipment
Graco Mark V or equivalent

Mixing
- Always mechanically mix product in full pack volumes.
- Ensure the two components are thoroughly combined until a uniform colour is obtained.

Application Advice
- Keep all product containers closed when not in use.
- Part B is moisture sensitive and should remain tightly closed before use.
- The product is self-priming onto correctly prepared steelwork. Damaged primer does not need to be repaired in C1 or C2 environments.
- The product should be spray applied at close proximity, approximately 600 mm from the surface, to avoid dusting and promote good surface coalescence.
- Use of a wet film gauge is essential.

Note: If the user needs to stop spraying for longer than 15 minutes flushing will be necessary.

Key Benefits Summary

- **Fast cure, even below 0°C, touch dry in 1 hour**

- **Early weather resistance, shower proof within 1 hour**

- **Self-priming system tolerant of light rusting to steel, up to 2 weeks post blasting**

- **High build potential with all ratings possible in one application**

- **Fire rating up to 120 minutes tested to BS476 and EN13381: Parts 6 & 8**

- **Designed for on-site use**

Site Work

- Galvanised bolts, once degreased, can be coated with no further preparation.
- Damaged coatings can be trimmed to a feathered edge and the material troweled in one application.
- The applied product once cured can be easily finished to a high level, by sanding or tooling with either electrical or hand tools.
- Repairs can be carried out using an SC900 Repair Kit.

Cleaning

Flush spray equipment with FC150 or an equivalent xylene based solvent, do not use solvents which contain water, as these can result in premature curing of the product in the spray line. Contact Technical Support if unsure of compatibility of cleaning agents.

Top Seal Requirements

Once DFT's have been achieved as specified, a Nullifire top seal can be applied: TS134 (2-part acrylic polyurethane) is recommended. Ensure the SC902 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. The SC900 repair kit should be used (sold separately) for repairing scratches and chips. Once repaired top seal should be re-applied. Refer to Nullifire System SC900 Maintenance Instructions.

Transportation

SC902 is compliant with the exemption for all shipping by road (ADR 2.2.3.1.5), as a Class 3 'flammable liquid' under the dangerous goods regulations.

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.

Technical Data

Property	Result
Composition	A low VOC, high build formulation based on advanced hybrid technology
Performance	
'Prohesion' Cyclic Corrosion test to ASTM G85:2009 Annex A5 At 1000 hours Maximum extent of undercut corrosion 6.00 mm from scribe mark Note: The above test was carried out on a primer-less steel substrate	
Certification	BS476 Part 20/21 - 1987 and EN13381: Part 6 & 8 Cellular Beams YB5
Building Classification	C1, C2, C3 and C4 environments* *please refer to Nullifire Specification Guidance for further details
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/litre
Mix Ratio	By Weight 100:12 By Volume 5.6:1
Gel Time (Liquid to Gel)	90 - 120 minutes
Pot-life or Sprayable Life	60 minutes
Theoretical Coverage	1,750 g/m² based on an applied 1.00 mm dry film thickness
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

Health & Safety Precautions

Safety data sheet must be read and understood before use.
Flammable - keep away from open flames and other ignition sources.

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.

Topseal Requirements

Once DFT's have been achieved as specified, TS134 Top Seals can be applied. Ensure the SC902 is completely cured before applying top seal.

ETAG018: Part 2 Condition	Description of Environment	Example	Approved Topseals
X: Exposed (also qualifies for Y & Z)	Exposure to rain Exposure to UV Uncontrolled humidity Uncontrolled temperature	Fully external steelwork Exposed perimeter steel Open construction site	TS134* * ETA approval pending (2016)
Y: Semi-exposed (also qualifies for Z)	Uncontrolled humidity Uncontrolled temperature No exposure to rain Limited exposure to UV	Car park Undercrofts Areas under a canopy	Not required (consider other factors)
Z1: Humid internal (also qualifies for Z2)	Humidity over 85% RH Temperature above 0°C	Plant rooms, Basements, Warehouse and production	Not required (consider other factors)
Z2: Dry internal	Humidity below 85% RH Temperature above 0°C	Office, Hospitals, Schools, Airports	Not required Decorative only