

SELECTION & SPECIFICATION DATA

Generic Type	Waterborne intumescent
Description	SC801 Waterborne Basecoat is a very low VOC, borate free, APEO free, water-based, thin film intumescent coating for the protection of structural steelwork. SC801 provides up to 120 minutes fire resistance to 'I' section beams, columns, hollow section columns and cellular beams. SC801 can be used on steel, cast iron and galvanised steel.
Features	<ul style="list-style-type: none"> • Rigorously tested and certified in accordance with BS476: Part 21: 1987 - Reference: <ul style="list-style-type: none"> • Certifire® CF5365 • Underwriters Laboratories (UL) Report No. R11193 • Waterborne technology • Very low VOC: <ul style="list-style-type: none"> • 99% below IEQ-3 Indoor Air Quality requirement of ≤ 100 g/litre • Halogen-free formulation • Low odour, user friendly • No topseal required for interior, dry non-decorative exposures • Rapid dry to recoat / topcoat (refer to dry time and ventilation tables overleaf) • Other Certification: <ul style="list-style-type: none"> • Fire Propagation / Spread of Flame <ul style="list-style-type: none"> • BS476: 6/7 Class 0 • EN13823 (SBI) and IMO smoke / toxicity • Certifire fully tested on cellular beams
Primers	<p>Refer to Altex Technical Services or relevant Altex / Carboline Coating Specification for approved primer options.</p> <p>Do NOT use thermoplastic types such as chlorinated rubber or conventional acrylic etc..</p>
Colour	White
Gloss	Matt
Dry Film Thickness	<p>DFT as specified on relevant fireproofing loading schedule.</p> <p>NOTE: Maximum 1200 microns WFT (Wet Film Thickness) per coat</p>
Solids Content	By volume 68% \pm 3%
Theoretical Coverage Rate	<p>6.8 m² / litre at 100 microns DFT</p> <p>1.36 m² / litre at 500 microns DFT</p> <p>Allow for loss in mixing and application.</p>
VOC Values	As Supplied : 1 g/L
Topcoats	As specified.

SUBSTRATES & SURFACE PREPARATION

General	All surfaces should be clean, dry, and free of surface contamination.
Steel	<p>Abrasive Blast to SSPC-SP 10 (AS 1627.4 Sa 2½) or better. Blast profile: average 75 microns, with a minimum of 40 microns.</p> <p>Or</p> <p>Minimum Power Tool Clean to SSPC-SP 3 (AS 1627.2 St 3) for touch ups and repairs. Prime as specified using approved primer.</p>
Galvanised Steel	Ensure all passivation coating is removed and abrade surface. Prime with compatible non-saponifiable primer.
Previously Painted Surfaces	Refer to Carboline / Altex Technical Services

MIXING & THINNING

Mixing	Power blend to a smooth homogeneous mix using a Jiffy Mixer or similar non-aerating mixer.
Thinning	Generally not recommended. Use clean fresh potable water if required
Ratio	N/A – single component coating
Pot Life	N/A

APPLICATION NOTES & CHECKLIST

Nullifire SC801 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 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, moisture or condensation during the application and drying of SC801.

Checklist	The following instructions are for on-site application only. Ensure that: <ul style="list-style-type: none">• The primer is compatible with SC801 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.• SC801 is stored correctly.• Surface is clean, dry and free from contamination.• Correct spray equipment is available, if appropriate.<ul style="list-style-type: none">• NOTE: Remove all line & gun filters• 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.
	**Site touch-up of galvanised nuts and bolt-heads do not require priming; ensure galvanising is clean and abrade if bright spangle still present.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General)	The preferred method of application for Nullifire SC801 is spray.										
Conventional Spray	Use only a high-capacity remote pressure pot assembly.										
Airless Spray	<table><tr><td>Pump:</td><td>40:1 ratio</td></tr><tr><td>Hose Diameter:</td><td>Min. 3/8" (9.5mm) ID</td></tr><tr><td>Hose Length:</td><td>Max 60 metres, in-line filters should not normally be used</td></tr><tr><td>Pressure:</td><td>2500-3000psi (17.2-20.6 MPa)</td></tr><tr><td>Fluid Tip:</td><td>0.017" to 0.021" free-flow tip.</td></tr></table>	Pump:	40:1 ratio	Hose Diameter:	Min. 3/8" (9.5mm) ID	Hose Length:	Max 60 metres, in-line filters should not normally be used	Pressure:	2500-3000psi (17.2-20.6 MPa)	Fluid Tip:	0.017" to 0.021" free-flow tip.
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Brush & Roller (General)	Brushing only suitable for small areas or touch-up and may result in a ribbed finish. Use a short-nap roller.										

CURING SCHEDULE

Estimated **self-recoat** times (hours) at varying film thicknesses in still air and with positive airflow (draught).

Drying of SC801 is dependent upon several factors including temperature (surface and ambient), air movement, humidity, method of application, and thickness of coating.

GUIDE ONLY:

		10°C	
Relative Humidity	Wet Film Thickness (µm)	Still Air	Air Flow
30%	700	6 Hours	3½ Hours
	1000	8 Hours	4½ Hours
	1200	12 Hours	5½ Hours
50%	700	12 Hours	4 Hours
	1000	16 Hours	5 Hours
	1200	24 Hours	8 Hours
70%	700	12 Hours	8 Hours
	1000	18 Hours	10 Hours
	1200	24 Hours	16 Hours

		20°C	
Relative Humidity	Wet Film Thickness (µm)	Still Air	Air Flow
30%	700	4½ Hours	1½ Hours
	1000	6 Hours	3 Hours
	1200	8 Hours	4½ Hours
50%	700	5 Hours	2 Hours
	1000	9 Hours	4 Hours
	1200	16 Hours	6 Hours
70%	700	10 Hours	4 Hours
	1000	12 Hours	7 Hours
	1200	18 Hours	12 Hours

		30°C	
Relative Humidity	Wet Film Thickness (µm)	Still Air	Air Flow
30%	700	3½ Hours	1½ Hours
	1000	4½ Hours	2½ Hours
	1200	6 Hours	3 Hours
50%	700	4 Hours	1½ Hours
	1000	6 Hours	6 Hours
	1200	10 Hours	4 Hours
70%	700	8 Hours	3 Hours
	1000	10 Hours	6 Hours
	1200	12 Hours	7 Hours

- Brushing or rolling adds about 20% to drying time (compared with spraying figures above)
- Drying times are doubled at 5°C or at over 75% relative humidity (RH)
- Final drying time **before topcoating is minimum of 16 hours**
- These figures are based on constant conditions, fluctuations of any factor up or down will give variations to the drying time
- If overnight condensation causes wetting a further full drying period should be allowed


CLEANUP & SAFETY

Cleanup | Clean up with fresh water. Hardened deposits may be removed with Thinner #10

Safety

For industrial use only. See the Altex Coatings General Safety Data Sheet, product label and Safety Data Sheet (SDS) for health and safety information prior to use.
Use with adequate ventilation. May cause eye and skin irritation. Do not breathe vapour or spray.
Wear suitable protective clothing such as gloves and eye and face protection.

PACKAGING, HANDLING & STORAGE

Shelf Life	6 months Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Packaging	25 kg pails (18.1 litres)
Storage Temperature & Humidity	Store at $\geq 5^{\circ}\text{C}$ and $\leq 25^{\circ}\text{C}$; 0 to 95% RH. Store indoors and under cover in temperate conditions. Do not expose to extreme heat, i.e. if stored outside in shipping containers keep product away from sun heated walls. Do not freeze.
Flash Point (Setaflash)	N/A: $> 100^{\circ}\text{C}$
Storage	Store in secure, dry warehouse conditions. Avoid large fluctuations between high and low temperatures. Avoid the formation of condensate due to low temperatures.
Distribution	Distributed in New Zealand by: <u>ALTEX COATINGS LTD</u> Altex Coatings Ltd, 91-111 Oropi Road, Tauranga 3112 New Zealand Phone: +64 7 541 1221
Manufacturer	 Construction Products Group Europe Tremco CPG UK Limited Coupland Rd, Hindley Green Wigan WN2 4HT UK

WARRANTY

Users should check they are referencing the latest product and safety data by checking for updates or amendments at www.altexcoatings.com.

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