

Selection & Specification Data

Generic Type A single pack, solvent-based intumescent coating for fire protection of structural steel.

Description Nullifire S605 Basecoat is designed to fireproof the interior and exterior steelwork for up to 2 hours fire rating, depending on the design. The recommended use for this product is fireproofing of steel beams, columns, tubes and pipes.

- Features**
- U.L.I. Listed – designs for many steel sections, to provide up to a 2 hour fire rating
 - Decorative Finish – Gives a smooth decorative finish. Compatible topcoats available in a wide range of colors.
 - Durable finish – Provides a hard dust free surface resistant to normal wear
 - UL Exterior Rated – can be permanently exposed to weather with the appropriate topcoat
 - UL 1709 rated for 2 hours
 - Thin film coating – Offers an economical solution to traditional fireproofing
 - VOC compliant
 - Easy repair – If damaged it can be easily repaired with Nullifire S Filler

Primers Nullifire S605 Basecoat should be applied over a compatible primer. A number of primers have been tested as compatible as listed below:

Carboguard® 888	Carbocoat® 115 SG
Carboguard® 893	Carbocoat 150
Carbozinc® 11	Carbocrylic 120
Carbozinc® 859	Carbomastic® 15
Rustbond	Nullifire® S620*

Penetrating Sealer
*Made to order only

If the steel has already been coated with another primer, refer to Carboline Technical Service for advice before applying the Nullifire S605. Nullifire S605 should not be applied over Chlorinated rubber or Bitumen type primers. Surface preparation should be carried out in accordance with the application instructions for the selected primers.

Selection & Specification Data (cont.)

Topcoats Once the S605 Basecoat has been applied to the specified DFT and is fully dry, it can be topcoated. For interior, use Carbocoat® 30, Carbothane® 134 HG or Carbothane® 133HB. Topcoat is not required for conditioned interior space. For exterior, Carboguard® 1340 (or Rustbond) plus Carbothane® 133 HB must be used.

Dry Film Thickness The dry film thickness required will depend on the specific fire rating and the W/D factor of the steel sections to be protected. The thickness can be found in the UL Directory under the relevant UL Design. For sections not listed, contact Carboline Technical Service. Typical DFT range is between 30-340 mils.

Limitations Not recommended for steelwork subject to continuous surface temperatures over 140°F (60°C) in normal use.

Physical Data (Typical Values)

S605 Color	Pale green
Specific Gravity	1.38
Volume Solids	67%
Durometer Hardness	Shore D: 65 - 70 (fully cured) Shore D: 40 (for topcoating)
W.P.G.	11.40 lbs.
V.O.C. (EPA Method 24)	2.44 lbs./gallon
Film Build (Spray)	40 mils (wet), 27 mils (dry)
Film Build (Brush)	15 mils (wet), 10 mils (dry)
Flash Point	86°F
Drying Time (between coats)	24 hours at 50°F

Test reports and additional data available upon written request.

Nullifire® S605

Approvals

UNDERWRITERS LABORATORY, INC.

Nullifire S605 has been tested in accordance with ASTM E-119 in the Underwriter's Laboratory, Inc.

ULI and ULC list it for the following designs:

<u>Design Number</u>	<u>(ULI)</u>
XR623	UL 1709
X629	Wide flange columns
X630	Tube columns
X631	Pipe columns
N609	Restrained and unrestrained Beams
D784	Beams (Protected Deck)
D935	Beams (Unprotected Deck)

This product should be applied in accordance with the appropriate design.

Classified for exterior use by U.L.I.

CITY OF NEW YORK – DEPT OF BUILDINGS

Nullifire S605 has been found acceptable for use in accordance with the following report numbers:

MEA 171-00-M	Beams
MEA 172-00-M	Beams
MEA 173-00-M	Columns/Tubes/Pipes
Class I	Flame Spread

CITY OF LOS ANGELES – DEPT. OF BUILDING & SAFETY RESEARCH

Report: RR25464

Packaging, Handling & Storage

Shipping Weight (Approximate)	Weight per gallon is 12 lbs. Weight per 5 gallons is 60. lbs. Weight per truckload is 45,000 lbs.
Storage (General)	Store indoors in a dry environment.
Storage Temperature	32°F (0°C) – 105°F (40°C)
Shelf Life	Min. 18 months

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**



March 2009 replaces June 2005

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline® and Nullifire® are registered trademarks of Carboline Company.