

# FIREPRO® 9310

## Solventless Ultra High Build Epoxy Intumescent Coating

PC 931

- FEATURES**
- PROVIDES EXTERIOR DURABLE PROTECTION
  - RESISTANT TO HANDLING DAMAGE
  - FAST DRYING
  - LOW VOC's, LOW ODOUR

**USES** FirePro® 9310 can provide up to 120 minutes of cellulosic fire protection for internal and external steel up to a C5 environment. No primer is required for a C3 environment.

**SPECIFICATIONS** Consult a Dulux Intumescent Specialist for specifications based on data for AS4100:1998 (R2016), BS476: Part 21 1987 and EN13381-8:2013.

### RESISTANCE GUIDE

<b>WEATHERABILITY</b>	Will chalk in exterior exposure if not top coated. Neither yellowing nor chalking detracts from the fire protection properties of the coating. Use a weatherable topcoat if required for appearance and UV resistance.	<b>SOLVENTS</b>	Very good solvent resistance.
<b>HEAT RESISTANCE</b>	Up to 120°C Dry Heat.	<b>WATER</b>	Excellent resistance to fresh and salt water.
<b>SALTS</b>	Excellent resistance to neutral and alkali salts.	<b>ALKALIS</b>	Suitable for splash and spillage of strong alkali.
<b>ACIDS</b>	Good resistance to splash and spillage of mild acids.	<b>ABRASION</b>	Good when fully cured.

### TYPICAL PROPERTIES AND APPLICATION DATA

<b>CLASSIFICATION</b>	Two Pack Epoxy	<b>APPLICATION CONDITIONS*</b>			
<b>FINISH</b>	Low Sheen		Min †	Max	
<b>COLOUR</b>	Light Grey	<b>Air Temp.</b>	10°C	40°C	
		<b>Substrate Temp.</b>	10°C	40°C	
		<b>Relative Humidity</b>		80%	
<b>COMPONENTS</b>	Two	<b>COATING THICKNESS (MICRONS)</b>			
<b>VOLUME SOLIDS</b>	100%		Min	Max	Recommended
<b>VOC LEVEL</b>	<2 g/L	<b>Wet film per coat (µm)</b>	600	4000	See FRL/FRR
<b>FLASH POINT</b>	Not Applicable	<b>Dry film per coat (µm)</b>	600	4000	See FRL/FRR
<b>POT LIFE</b>	30 min (18.6kg kit, 20°C) 15 min (18.6kg kit, 35°C)	<b>SUITABLE SUBSTRATES</b>	Abrasive blast clean steel, or suitably primed steel.		
<b>MIXING RATIO</b>	Part A : 100 Part B : 7.5 (BY WEIGHT)	<b>PRIMERS</b>	Specified Dulux® Protective Coatings primers.		
<b>THINNER</b>	DO NOT THIN	<b>TOPCOATS</b>	Specified Dulux® Protective Coatings topcoats.		
<b>CLEAN UP</b>	920-81942 Duthin® 450 or, 965-63020 CR Reducer	<b>APPLICATION METHODS</b>	See Airless Equipment Recommendations		
<b>PRODUCT CODE</b>	790-H0362 Grey (Part A) 976-H0355 Hardener (Part B)				

\* Refer to FirePro® Application Guide.

† While the minimum application temperatures are 10°C, productivity is significantly improved at 16°C or higher.

### DRYING CHARACTERISTICS AT 1000 µm DRY FILM THICKNESS\*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min	Max <sup>1</sup>
20° C	50%	8 Hours	24 Hours	7 Days	6 Hours	7 Days

\*These figures are a guide only.

<sup>1</sup> Max overcoating must be reduced to 2 days for exterior exposure.

If the max recoat window has been exceeded, all affected surfaces must be thoroughly and uniformly abraded prior to the application of another coating. If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT. The DFT of FirePro® 9310 is dependent on FRL/FRR.

### SPREADING RATE ASSUMING NO LOSSES

**0.77 square metres per kilogram equals 1000 µm dry film thickness**

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions and surface roughness.

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<b>SURFACE PREPARATION</b>	<b>Steel:</b> Round off all rough welds, sharp edges and remove weld splatter. Remove oil grease and other contaminants in accordance with AS1627.1. Dulux recommends that surfaces be degreased with Gamlen CA1 (a free rinsing, alkaline detergent) according to the manufacturer's written instructions and safety warnings. Abrasive blast-clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40-70 microns.								
<b>APPLICATION</b>	Mix the entire contents of Part A thoroughly using a double helical mixing blade and a heavy duty power mixer such as an Intex® Mega Mixer AMX 620 until the contents are uniform. Mix part A and part B together with the same power mixer until a thoroughly homogeneous mixture is achieved. While power mixing, scrape sidewalls of pail with a long handled metal spatula, drawing the product into the main body of the material. Transfer the mixed material into a clean container and remix thoroughly before pouring into the stainless steel hopper. NOTE: A large volume of material will set up quickly if not applied or reduced in volume in a timely manner. Product needs to be gravity fed through a material hopper – material will not feed through a suction tube.								
<b>BRUSH/ROLLER</b>	Suitable for small areas only. When brushing and rolling additional coats may be required to attain the specified thickness. Brushes - use high quality synthetic or nylon bristle brushes. Roller covers - use high quality 10mm or 12 mm synthetic woven nap roller covers.								
<b>APPLICATION EQUIPMENT</b>	<b>Airless Spray: Graco K60FH2 (60-1 Pump) or equivalent</b> Thinning is not recommended. Apply in multiple wet coats overlapping each pass 50%. <table border="1"> <thead> <tr> <th>Tip Orifice</th> <th>Atomizing Pressure</th> <th>Mat'l Hose ID</th> <th>Filters</th> </tr> </thead> <tbody> <tr> <td>0.021" – 0.023" (533 - 584 microns)</td> <td>3,600 – 4,000 psi (248 – 290 bar)</td> <td>3/8" or 1/2" (9.5 mm or 12.7mm)</td> <td>No Filters in Pump Manifold or Spray Gun</td> </tr> </tbody> </table> <b>NOTE:</b> A 2 metre x 3/8" (9.53 mm) whip hose is allowed at the end of a 1/2" material hose for greater ease of application. The use of nonrestrictive swivel connection off the spray gun is recommended.  Add the following to a Graco K60FH2 Airless Pump: <ul style="list-style-type: none"> <li>Graco SS hopper, part #24X570 – Gravity feed product to lower</li> <li>Graco 4500w/240v inline heater &amp; mounting Kit, part No's 245863 &amp; 17V573 – Used to reduce viscosity. The material temperature at the spray tip should be 35°C.</li> <li>Graco XHF Direct feed spray gun &amp; XHD RAC Switch Tip and Guard</li> </ul>	Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Filters	0.021" – 0.023" (533 - 584 microns)	3,600 – 4,000 psi (248 – 290 bar)	3/8" or 1/2" (9.5 mm or 12.7mm)	No Filters in Pump Manifold or Spray Gun
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<b>PUMP MAINTENANCE</b>	After every 5- 6 kits the equipment should be flushed with solvent. This is accomplished in two stages. First, Duthin® 450 (920-81942) or CR Reducer (965-63020) (either new or filtered) is run through the pump for five minutes. Then a second flush is done, again for five minutes using fresh Duthin® 450 or CR Reducer (This solvent can be used for the first flush cycle of the next flush cycle). After the end of a work shift, the pump is flushed as stated. This time, after the second flush, the lower end of the pump is disassembled and thoroughly cleaned to remove all traces of coating material. It should be noted that the amount of flushing needed is dependent on temperatures and extended spray times.								
<b>PRECAUTIONS</b>	This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux® Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. The rate of cure is dependent upon temperature. Do not apply at temperatures below 10°C. Do not apply at relative humidity above 80% or when the surface is less than 3°C above the dewpoint. The surface to be coated must be totally free of moisture and contaminants. Ensure that in all circumstances FirePro® 9310 is applied over suitable primers. Do not use this product without consulting a Dulux® Protective Coatings Consultant.								
<b>CLEAN UP</b>	Clean all equipment with Duthin® 450 (920-81942) immediately after use. As an alternative CR reducer may be used. Refer to the FirePro® Application Guide for more details.								
<b>APPLICATORS</b>	FirePro® 9310 must be installed by a Dulux Registered Intumescent Applicator.								
<b>SAFETY PRECAUTIONS</b>	<b>Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEETS are available from Customer Service (13 23 77) or <a href="http://www.duluxprotectivecoatings.com.au">www.duluxprotectivecoatings.com.au</a></b>								
<b>STORAGE</b>	Store in a well-ventilated area under cover. Keep containers closed at all times. Shelf life – 24 months								
<b>HANDLING</b>	As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.								
<b>USING</b>	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting Regulations.								
<b>FLAMMABILITY</b>	Although this product is not flammable the cleaning agent is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO <sub>2</sub> or dry chemical powder. On burning will emit toxic fumes.								
<b>WELDING</b>	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.								

COMPANY INFORMATION		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		<b>PACKAGING</b>	Available in 18.6 kg kits
DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton 3168 A.B.N. 67 000 049 427	DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 55 133 404 118	<b>TRANSPORTATION WEIGHT</b>	1.3 kg/Litre (Average of components)
		<b>DANGEROUS GOODS</b>	Part A: Non Dangerous Goods Part B: Class 8 UN 2735

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