Carboguard® 891 FC

Selection & Specification Data

Generic Type Two-components, fast curing cross-linked epoxy.

Description Carboguard 891 FC is a high solids, high gloss, high build epoxy topcoat.

Features

- Gives a hard and tough film
- Fast curing
- Excellent corrosion protection
- Better flexibility than most epoxy coatings
- Smooth surface, easy to clean
- Wide area of industrial uses within hydro-power, offshore, chemical processing, and other heavy industry

Color Most RAL colours

Finish Gloss

Compatible Coatings Normally not topcoated. May be topcoated with epoxy, polyurethane or others as recommended by Carboline.

Dry Film Thickness 75 – 250 microns per coat, normally 150 microns.

Wet Film Thickness 100 – 335 microns per coat, normally 150 microns.

Solids Content By volume: 75 ± 2%

Theoretical Coverage Rate 5,0 m^2/l at 150µm
Allow for loss in mixing and application.

Dry Temp. Resistance
Continuous: 120°C
Non-continuous: 150°C

Limitations Not recommended for immersion service or exposures in areas where chalking is undesirable.

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Substrates & Surface Preparation

General Surface must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.

Steel Abrasive blasting to min. Sa 2½ (ISO 8501-1). Alternatively, ultra high pressure water jetting to Nace No. 7 min. C Vis WJ-2. Max flash rust; C Vis WJ-2M.

Concrete Normally applied over clean, dry recommended primer. Can also be applied directly to concrete thinned 25%. Concrete must be cured at least 28 days at 24ºC and 50% relative humidity or equivalent. Prepare surfaces in accordance with with ASTM D42582 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing.

Application Equipment

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 following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Airless Spray

Pump ratio:	30:1 (min.) *
GMP Output:	3.0 (min.)
Material Hose:	3/8" I.D. (min.)
Tip Size:	.017-.021"
Output PSI:	2100-2300
Filter Size:	60 mesh

* Teflon packings are recommended and available from the pump manufacturer. Use 45 : 1 pump ratio for elevated applications and ½" I.D. for hose lengths greater than 60'.

Brush & Roller (General) Not recommended for tank lining applications except when striping welds. Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 24ºC.

Brush Use a medium bristle brush.

Roller Use a medium-nap synthetic roller cover with phenolic core.

Mixing & Thinning

Mixing Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Ratio 1 : 1 (A to B)

Thinning May be thinned up to 15% with Carboline Thinner #2.
Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life Approx. 3 hours at 24ºC – longer at lower temperatures.

Cleanup & Safety

Cleanup Use #2 Thinner or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

Safety Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

Ventilation When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used.

Caution This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with applicable regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	15-30°C	15-30°C	15-30ºC	30-85%
Minimum	10°C	5°C	5°C	0%
Maximum	30°C	50°C	45°C	85%

Industry standards are for substrate temperatures to be 3ºC above the dew point. Condensation due to substrate temperatures below the dew point can interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to Recoat
5ºC	16 Hours
10°C	8 Hours
16°C	5 Hours
24°C	3 Hours
32°C	1½ Hours

These times are based on 150 microns dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure.

Packaging, Handling & Storage

Kit Standard Part A 10 litres
Part B 10 litres

Storage (General) Store indoors.

Storage Temperature & Humidity 5° - 45°C
0 - 95% relative humidity

Shelf Life Part A, 48 months at 24°C
Part B, 24 months at 24ºC

Note

This product shall only be used as a single-coat or in a system with other recommended Carboline products. Otherwise an approval shall be issued by Carboline.

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