

## Selection & Specification Data

**Generic Type** Solvent free, two component epoxy amine cured.

**Description** **CARBOGUARD 940** is a very high solids self priming coating. The applied coating, after curing is extremely hard and resistant both to mechanical damage and abrasion. Excellent resistance to fresh, sea and potable water

**Features**

- Immersion service in potable water
- Immersion service in sea and fresh water
- Excellent resistance to mechanical and abrasion damage
- Excellent corrosion resistance in tanks and pipes destined to contain food grains
- interior of pressure water pipes and sea water intake pipes.

**Certifications** Tested for potable water contact in according to DM 21.03.73-DM 26.04.93-82/711/CEE, 85/572/CEE, 90/128/CEE, 92/39/CEE, 93/10/CEE, 93/111/CEE, 98/8/CEE, 93/9/CEE, 95/3/CEE, 96/11/CE, 97/48/CE, 99/91/CE

**Color** Dark grey and White Only for potable water

**Finish** Gloss.  
Will discolor, chalk and lose gloss in sunlight exposure.

**Dry Temp. Resistance** Continuous: 90°C (194°F)  
Non-continuous: 110°C (230°F)

**Maximum temperature in immersion** Continuous: 60°C (140°F) Potable Water

**Substrates** Must be applied over properly prepared steel or concrete

**Compatible coatings** May be applied over properly prepared steel or concrete.

**Solids Content** By Volume: 98±2%  
**Viscosity** Thixotropic product

**Recommended dry film thickness** 200-1000µm (8-40 mils) in one standard coat.  
500-1000µm (20-40 mils) applied in one coat, wet on wet.

**Theoretical coverage** 200 micron: 4.90 sq.m./lt.  
300 micron: 3.20 sq.m./lt.  
500 micron: 1.96 sq.m./lt.  
1000 micron: 0.98 sq.m./lt.  
Allow for loss in mixing and application. Product reduction during curing up to 5% by volume.

**Flash point (PMCC)** Part A: 30°C ( 75°F)  
Part B: 45°C (113°F)

**Shipping pack** Part A: 6 liters  
Part B: 4 liters

**Shelf life** 24 month from manufacturing date stored in sealed drums. Storage limit 4-35°C (40-95°F)

## Chemical Resistance

Exposure	Immersion	Splash & Spillage	Fumes
Diluted acids	NR	Good	Good
Diluted alkalis	NR	Good	Good
Petroleum products	Excellent	Excellent	Excellent
Salts solutions	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

## Surface Preparation and Mixing

**General** Remove oil and grease from surface to be coated with clean rags soaked in suitable thinner, according to standard SSPC-SP1

**Steel** Abrasive blast cleaning in accordance with ISO 8501-1 SA 3, to obtain a minimum 40 µm (Rz-DIN 30671) blast profile.

**Concrete** Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing.

**Mixing** Power mix separately Part A and Part B, then combine and mix under slow agitation in the following proportions:

Component	Parts by volume	STD KIT
Part A	1.5	6 liters
Part B	1	4 liters

**Thinning** **THINNING IS NOT REQUIRED.** Thinner use may cause the detachment of applied coating, voiding the results of all tests such as adhesion, mechanical resistance and electrical insulation properties.

**Pot-Life** 60 minutes at 24°C (75°F) and less at higher temperatures.

**POT-LIFE ENDS WHEN COATING LOSES BODY AND BEGINS TO SAG.**

## Application Conditions

Temperature	Product	Surface	Ambient	RH %
Normal	20-30°C	20-30°C	20-30°C	30-70%
Minimum	20°C	10°C	10°C	0%
Maximum	32°C	32°C	32°C	85%

Do not apply when the surface temperature is less than 3°C above the dew point  
Special application techniques may be required above or below normal conditions.

## Application Equipment

**Spray Application** CARBOGUARD 940 has been formulated without solvent and can require, depending on environmental temperatures and on the spraying equipment used, particular adjustments of spray techniques. The following guide lines should help the applicator in using correctly the spraying equipment.

**Airless** Pump Ratio: 60:1  
LPM output: 12 liters minimum  
Material Hose: 3/8" ID minimum  
Max. Hose length 20 mt.  
Tip size: .023-.028  
(Reverse Clean Type)

Required DFT is obtained by multiple pass wet on wet, that is without waiting for the curing at the previous coating. It is advisable to measure WFT frequently, to ensure that the cured film is not below the specified DFT.

**P.C.U.** P.C.U. allow to use paint hoses up to 30 Mt. and over, insulated and/or heated.  
Material hose 3/8" ID.  
Tip Size .018-.029" ID  
Fluid Filters not lower than 30 Mesh to be place before the mixing

## Drying Time and Curing Schedule

Temperature	Dry to handle	Between Min.	Coats Max.	Final cure
10°C (50°F)	72 h	48 h	72 h	10 days
20°C (68°F)	48 h	18 h	24 h	7 days
30°C (86°F)	24 h	12 h	24 h	4 days

## Inspection and Tests

Inspection and tests, such adhesion, holiday test, impact test and DFT measurements, must be done only when curing has completed.

## Touch-Up after Curing

CARBOGUARD 940 is not recoatable without special surface preparation when curing completed

### There are 2 types of touch-up:

**SMALL up to 200 sq./cm. Without substrate exposure.**

Power tool grinding of damaged areas and application by brush of one coat of Carboguard 940 up to specified DFT

**LARGE or SMALL areas with substrate exposure**

Blast in accordance with ISO 8501-1 (SA 2 ½) of all exposed substrate and roughing the close coating and then apply Carboguard 940 by spray up to specified DFT

## Cleanup and Safety

**Cleanup** Use Thinner#2 or Thinner#76. In case of spillage, absorb and dispose 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.

**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 the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

**Carboline Italia SpA**

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