

Carboguard 191 Finish

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

General Paint Name | High-build, epoxy resin paint

Generic Type | Epoxy/ polyamide amine

High-build epoxy topcoat which can be tinted into various colors. Recommended for the use for Description various steel structures, concrete substrates, and various machinery and equipment.

Excellent chemical resistance

"Low VOC paint" (Weight solids ≥ 70%)

Color | White, Light Colors, and others

Finish | Semi-Gloss

Carbozinc 11, Carbomastic 15J, etc.

Primer

A mist coat may be required to minimize bubbling over inorganic zinc-rich paints.

Solid(s) Content | By Volume 70% +/- 2%

Solids Content | By Weight 82% +/- 2%

Mixed Density | $1.43 + -0.03 \text{ g/cm}^3$

VOC Values | As Supplied : 257 g/ L

Application Method	Dry Film Thickness (microns/coat)	Theoretical Coverage Rate (g/m²)	Practical Coverage Rate (g/m ²) [*]
Spray	100	205	370
Brush	60	123	180-200

^{*:} Practical Coverage Rates are estimates based on average results. Individual results may vary based on several issues including the shape and location of the item being painted as well as environmental conditions like temperature, humidity and wing. The skill level of those applying the paint will also impact the final results. For details, consult Japan Carboline staff.

Wet/ Dry (As Supplied) | 1.43

Sag Resistance (Dry) | 279 microns

Continuous: 93°C (199°F) Dry Temp. Resistance Non-Continuous: 121°C (250°F)

Flexibility Good

Abrasion Resistance | Very Good

Not recommended for immersion services in warm water (54°C or higher), strong organic and Limitations inorganic acids, or solvents.

Topcoats | Carbothane 234 HS, etc.

SUBSTRATES & SURFACE PREPARATION

General Remove any oil or grease from surface to be coated with clean rags soaked in an adequate solvent.

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MIXING & THINNING

Use of Carboline Thinner 15 or 33 is recommended.

Thinning

Use of thinners other than those supplied or recommended by JAPAN CARBOLINE may adversely affect product performance.

Pot Life 10°C

5°C: 10 hours 10°C: 8 hours 20°C: 4 hours 30°C: 2 hours

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.

Application Tool | Airless spray, Air spray, Brush

• Pump Ratio: 30:1

Output Pressure: 15-20 MPaTip Size: 0.017-0.021"

Airless Spray

• Filter Size: 50 Mesh (if needed)

• Thinning: up to 15 weight %

• Appropriate Visocity: 0.5-1.0 Pa·s (5-10 Poise)

APPLICATION CONDITIONS

Condition	Surface	Ambient	Humidity
Minimum	5°C (41°F)	5°C (41°F)	0%
Maximum	50°C (122°F)	43°C (109°F)	85%

CURING SCHEDULE

Surface Temp.	Maximum Recoat Time	Minimum Recoat Time	Dry Hard
5°C (41°F)	14 Days	72 Hours	72 Hours
10°C (50°F)	10 Days	36 Hours	36 Hours
20°C (68°F)	7 Days	18 Hours	18 Hours
30°C (86°F)	4 Days	9 Hours	9 Hours

At ambient temperature of 10°C or lower, substrates need to be heated for proper curing.

Curing schedule is based on 100 micron 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

Shelf Life 12 months (when kept in original unopened containers)

Storage | Store indoors.

Net Weight	22 kg kit	5.5 kg kit
Part A	16 kg	4 kg
Part B	6 kg	1.5 kg



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PACKAGING, HANDLING & STORAGE

• Part A: 14°C

Flash Point (Setaflash)

Part B: 19°CCarboline Thinner 15: 27°C

• Carboline Thinner 33: 35°C

TYPICAL CHEMICAL RESISTANCE

Exposure	Fumes	Splashes & Spills
Acids	Very Good	Very Good
Alkalies	Excellent	Excellent
Salt	Excellent	Excellent
Solvents	Excellent	Very Good
Water	Excellent	Excellent

Chemical resistance in immersion services;

- Alkalies and Salt: Excellent (up to 66°C)
- Water: Excellent (up to 54°C)
- Others: Not Recommended

(Excellent > Very Good > Good > Fair > Poor > Not Recommended)

UPDATE INFORMATION

Last Modified | February, 2018

Control Number | PDS004-011

WARRANTY

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