



RailGard 9000

Description: RailGard 9000 is a high build, direct to metal epoxy to be

applied as a single coat system for the exterior of railcars and

interior for Carbon Black Hopper Cars.

Features: Direct to Metal

High gloss finish VOC compliant

High Solids Formulation Excellent build on edges

Rapid and extended re-coat windows

Single coat capability

Excellent wetting and adhesion properties

Good chemical resistance

1:1 Mixing Ratio Fast Drying

Performance: Salt Spray (ASTM B 117) 1000 hours

Plane blistering or rusting: none

Physical Data (Typical): Abrasion resistance (ASTM D 4060)

1 kg load/1000 cycles (ASTM D 4060) weight loss

CS 17 wheel 22 mg

Impact resistance (ASTM D 2794)

Direct impact 80 in-lbs.

Adhesion (ASTM D 4541) 4031 psi

Dry Temperature resistance (non-immersion)

Continuous 250°F Non-continuous 300°F

Theoretical volume solids of mixed material 82±2% Theoretical coverage of mixed gallon (1 mil) 1315 sq. ft.

@ 5 mils 263 sq. ft.



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Volatile Organic Content Un-thinned 1.08 lbs./gal.

Chemical Resistance: RailGard 9000 is resistant to a wide range of chemicals in

atmospheric exposures. The following is a guide to the proper

selection.

Splash & Spillage **Fumes Exposure** Acids Good Good Alkaline Excellent Excellent Excellent Solvents Good Salt Water Excellent Excellent Water Excellent Excellent

Film Thickness: Dry film thickness: 4 to 6 mils

Wet film thickness: 5 to 8 mils

Maximum 12 mils DFT in one coat applications Theoretical coverage: 263 sq. ft. @ 5 mils DFT

Primer/Substrates: RailGard 9000 is normally applied directly to steel.

Topcoats: When additional protection is required, RailGard 9000 may be

top coated with a urethane finish coating.

Colors: RailGard 9000 is normally used in black or gray. Custom

colors are available.

Shipping Data

Packaging unit2 gal.10 gal.Base1 gal.5 gal.Converter1 gal.5 gal.

Shipping weight (approx.)

Package unit 21 lbs. 53 lbs. 1gal. 5gal.



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Flash Point: (Setaflash): Base 94°F

Converter 108°F

Shelf Life: 1 year for both the base and the converter when stored inside

at 40°F to 100°F.

Surface Preparation: Remove oil and grease from the surface with solvent or a

commercial cleaner, which does not leave a residue according to SSPC-SP1. Steel: Abrasive blasting is preferred when possible as the performance is enhanced. For normal environments, abrasive blast to a Commercial finish per SSPC-SP 6 to obtain a 1 ½ to 3 mil profile. For immersion conditions, abrasive blast to a Near-white finish per SSPC-SP 10 to obtain 1 ½ to 3 mil profile. For touch up areas, which do not permit abrasive blasting, Hand Tool cleaning per SSPC-SP 2, Power Tool cleaning per SSPC-SP 3 or High Pressure Water cleaning per SSPC-SP12/NACE 5 WJ-4 is

recommended.

Mixing: Power mix each component, then blend Converter into the

Base and mix until uniform at the following ratio:

RailGard 9000 Base 1 gallon 5 gallon RailGard 9000 Converter 1 gallon 5 gallon

Thinning: Thinning is not required for most applications; however

RailGard 9000 may be thinned from 0% to 10% with Davis-Frost recommended reducers. MAK is recommended for overcoating inorganic zinc primers as well as for brush and roller applications of RailGard 9000. Please contact Davis-

Frost for other recommended thinners.

Pot Life: Three hours at 75°F and less at higher temperatures.



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Application Conditions: <u>Material</u> <u>Surface</u> <u>Ambient</u>

 Minimum
 50°F
 50°F
 50°F

 Maximum
 90°F
 110°F
 110°F

Note: Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment: Conventional Spray: Industrial sprayers such as DeVilbiss

MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D.

fluid tip and air cap are recommended.

Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a .017" to .021" tip is recommended. A 30 mesh

inline filter is recommended.

Plural Component Airless Spray: Graco's XTreme Mix is the

preferred plural component equipment.

Power Mixer. Use only explosion proof power mixers.

Brush or Roller: Use medium brush and short nap roller with

solvent resistant fibers and core.

Drying Time: The following minimum times are based on a 5 mil DFT and

adequate air ventilation. Higher thickness and reduced air

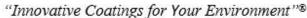
circulation increase drying times.

Surface Temp.	To Touch	To Handle	Final Cure
50°F	12 hrs.	32 hrs.	4 days
60°F	6 hrs.	16 hrs.	2 days
70°F	3 hrs.	8 hrs.	1 day
80°F	2 hrs.	5 hrs.	12 hrs.
90°F	1 hr.	3 hrs.	6 hrs.

RailGard 9000 can be applied in a wet-on-wet manner, which eliminates the dry time between coats when re-coating with

itself.







Maximum Re-coat: RailGard 9000 is formulated with an unlimited re-coat window.

However, when re-coating an aged epoxy, it is imperative that the surface contamination be removed prior to re-coating. High pressure water washing is an acceptable method of removing

chalk and surface contamination.

Cleanup: Cleanup with M.E.K.

RAILGARD 9000 061118 DEL H/Users/WP51/PDS RAILGARD

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