Multi-Gard 22-1333 SG

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Aliphatic Acrylic-Polyester Polyurethane
Description	Suitable for application over a number of Carboline primers and intermediates, this material provides good weathering performance in a broad range of colors.
Features	Good performance properties in mild aggressive environments High build; suitable for many two-coat systems Application by spray, brush or roller VOC compliant to current AIM regulations
Color	RAL K-7 fandeck with tint system.
Finish	Semi-Gloss
Primer	Refer to Substrates & Surface Preparation
Dry Film Thickness	3.0-5.0 mils (75-125 microns) per coat.*Dry film thickness in excess of 5 mils (150 microns) per coat is not recommended. * Certain colors may require multiple coats for hiding.
Solids Content	By Volume 66% +/- 4%
Theoretical Coverage Rates	25.6 m²/l at 25 microns 6.4 m²/l at 100 microns Allow for loss in mixing and application.
Theoretical Coverage Rate	26.0 m²/l at 25 microns (1059 ft²/gal at 1.0 mils) Allow for loss in mixing and application.
VOC Values	As supplied: 2.75 lbs/gal (310 g/l) * * When tinted values may vary slightly with color.
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C) Discoloration and loss of gloss is observed above 200°F (93°C). The alignment of aluminum flakes in aluminum-filled finishes is very dependent on application conditions and techniques. Care must be taken to keep conditions as constant as possible to reduce variations in final appearance. It is also advisable to work from a single batch of material since variations can occur from batch to batch. For more information consult Carboline Technical Service Department.
Topcoats	Carbothane® Clear Coat when required.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces 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. Refer to the specific primer's Product Data Sheet for detailed requirements of the specified primer.
Steel	SSPC-SP6 with a 1.5-2.5 mil (37.5-62.5 micron) surface profile for maximum protection. SSPCSP2 or SP3 as minimum requirement. Prime with specific Carboline primers as recommended by your Carboline sales representative.

SUBSTRATES & SURFACE PREPARATION

Galvanized Steel	Prime with specific Carboline primers as recommended by your Carboline Sales Representative. Refer to the specific primer's Product Data Sheet for substrate preparation requirements.
Aluminum	SSPC-SP1 and prime with appropriate Carboline primer as recommended by your Carboline sales representative.
Previously Painted Surfaces	Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "XScribe" adhesion test. Prime with specific Carboline primers as recommended by your Carboline sales representative.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	System	Results
ASTM B117	Raspalanmış Çelik Carboguard 616 (125 µ) + Multi-Gard 22-1333 SG (75 µ)	No rusting, or blistering on plane or scribe 1500 hours.
ASTM G154 QUV (UVA 340 bulb, 8 hour UV, 4 hour condensation Cycyle)	Blasted Steel 1 coat Epoxy 1 coat Multi-Gard 22-1333 SG	Color change after 1500 hours, less than 2 McAdam units; no bubbling, rusting, cracking and chalking. Brightness variation less than 30%

MIXING & THINNING

Mixing	Power mix Part A separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Spray: Up to 11 oz/gal (max. 20%) w/ #25 Roller: Up to 18 oz/gal (max. 15%) w/ #25. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. In extreme cold whether Thinner# 25 WT can be used. Thinner #214 may also be used up to 6 oz/gal for either spray or brush/roller application. Thinner #236E may also be used to thin this product to minimize HAP and VOC emissions. Consult Carboline Technical Service for guidance.
Ratio	7:1 Ratio (A to B) (by Volume) 7 Units by Volume Multi-Gard 22-1333 SG Comp. A 1 Unit by Volume Urethane Converter 811
Pot Life	2 Hours at 75#F (24#C) and less at higher temperatures. Pot life ends when coating becomes too viscous to use. MOISTURE CONTAMINATION WILL SHORTEN POT LIFE AND CAUSE GELLATION.

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.

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Spray Application	This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.
Conventional Spray	Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 30:1 (min.)* GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: .013-.017" Output PSI: 2100-2300 Filter Size: 60 mesh *Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	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 75#F (24#C).
Brush	Recommended for touch-up only. Use a medium, natural bristle brush.
Roller	Use a medium-nap synthetic roller cover with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	4°C (39°F)	4°C (39°F)	4°C (39°F)	0%
Maximum	38°C (100°F)	43°C (109°F)	43°C (109°F)	85%
Optimum	23°C (73°F)	23°C (73°F)	23°C (73°F)	47%

Industry standards are for substrate temperatures to be 5°F (3°C) above the dew point. This product simply requires the substrate temperature to be above the dew point.
Caution: This Product is moisture sensitive in the liquid stage and until cured. Protect from high humidity, dew and direct moisture contact until cured. Application and/or curing in humidities above maximum, or exposure to moisture from rain or dew may result in a loss of gloss and/or microbubbling of the product.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Final Cure
5°C (41°F)	32 Hours	28 Days
15°C (59°F)	16 Hours	14 Days
25°C (77°F)	8 Hours	7 Days
35°C (95°F)	2 Hours	4 Days

* When tinted values may vary slightly with color. These times are based on a 3.0 mil (75 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.
Maximum recoat time is 1 year. Surface must be clean and dry. As part of good painting practice it is recommended to test for adhesion by wiping the surface with Thinner 25. If the film shows a slight "tack" the surface is suitable for recoating without extensive surface preparation such as abrading.

CLEANUP & SAFETY

Cleanup	Use Thinner #2 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. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved supplied air respirator.
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.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: Min. 24 months at 75°F (24°C) Part B: Min. 12 months at 75°F (24°C) *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	**20 Lt Kit** 17,5 Lt Comp. A (25-28 kg Depending on the color) 2.5 LT Urethane Converter 811 (3,2 kg)
Storage Temperature & Humidity	40° -110°F (4-43°C) 0-90% Relative Humidity
Flash Point (Setaflash)	Part A: 77°F (25°C) Part B: 91°F (33°C)
Storage	Store Indoors.

WARRANTY

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