

SELECTION DATA

GENERIC TYPE: Modified aluminum epoxy mastic.

GENERAL PROPERTIES: A self-priming, high-build coating with excellent adhesion to rusted steel and most aged paints.

- Proven field performance.
- Excellent performance over minimal surface preparations.
- Excellent application characteristics.
- Excellent film build on edges.
- Compatible with most aged coatings.
- Single coat for most applications.
- Meets the most VOC (Volatile Organic Content) regulations.

RECOMMENDED USES: Particularly for maintenance painting of rusty steel or upgrading old coatings. Ideal for offshore structures, marine, metal buildings, piping, process equipment, highway bridges and exposed structural steel. Hand or power tool cleaning is often acceptable surface preparation. May also be used where hand tool cleaned steel is being coated for the first time.

NOT RECOMMENDED FOR: Immersion service in acids, alkalis or solvents.

TYPICAL CHEMICAL RESISTANCE:

| Exposure | Immersion | Splash & Spillage | Fumes |
|------------|------------|-------------------|-----------|
| Acids | NR | Fair | Very Good |
| Alkalies | NR | Good | Excellent |
| Solvents | NR | Good | Excellent |
| Salt Water | Excellent* | Excellent | Excellent |
| Water | Excellent* | Excellent | Excellent |

*Discolors to gray.

TEMPERATURE RESISTANCE: (Non-immersion)

Continuous: 180°F (82°C)
Non-continuous: 250°F (121°C)

SUBSTRATES: Properly prepared steel, rusty steel, aged galvanized steel or others as recommended.

COMPATIBLE COATINGS: May be used over most generic types of coatings which are tightly adhering and properly prepared. A test patch is recommended over existing coatings. A mist coat may be required over inorganic zinc to minimize bubbling. A topcoat is not normally required but most generic types of coatings may be applied as topcoats.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

CARBOMASTIC 15 LOW ODOR

By Volume
90% ± 2%

VOLATILE ORGANIC CONTENT:

The following are nominal values:

As Supplied: 0.74 lbs/gal (88 g/l)

Thinned:

| Thinner | oz/gal | lbs/gal | g/l |
|---------|--------|---------|-----|
| 10 | 32 | 2.02 | 242 |
| 76 | 32 | 1.93 | 231 |

RECOMMENDED DRY FILM THICKNESS PER COAT:

5 mils (125 microns) on steel substrates (measured excluding the rust).

3 mils (75 microns) over existing coatings.

For severe exposures including immersion, a minimum total thickness of 7 mil (175 micron) applied in 1 or 2 coats is recommended.

Dry film thickness in excess of 10 mils (250 microns) per coat is not recommended. Excessive film thickness over inorganic zinc will increase damage during shipping and erection.

THEORETICAL COVERAGE PER MIXED GALLON:

1444 mil ft² (36.0 m²/l at 25 microns)

289 ft² at 5 mils (7.2 m²/l at 125 microns)

STORAGE CONDITIONS: Store indoors.

Temperature: 45-110°F (7-43°C)

Humidity: 0-90%

SHELF LIFE: 24 months when stored indoors at 75°F (24°C).

COLOR: Aluminum (C901) is standard. Red (M500) is available for use as a contrasting primer in multiple coat applications but should always be topcoated.

Color variations within a batch and from batch to batch may occur due to the metallic pigments and variations in application techniques and conditions.

ORDERING INFORMATION

Prices may be obtained from your Carboline Sales Representative or Carboline Customer Service.

APPROXIMATE SHIPPING WEIGHT:

| | 2 Gal Kit | 10 Gal Kit |
|-------------------------|--------------------|----------------------|
| CARBOMASTIC 15 LOW ODOR | 25 lbs (11 kg) | 124 lbs (56 kg) |
| Thinner 10 | 1s 8 lbs (4 kg) | 5s 40 lbs (18 kg) |
| Thinner 76 | 8 lbs (4 kg) | 37 lbs (17 kg) |

FLASH POINT: (Setflash)

CARBOMASTIC 15 LOW ODOR Part A

>200°F (>93°C)

CARBOMASTIC 15 LOW ODOR Part B

76°F (24°C)

Thinner 10

83°F (28°C)

Thinner 76

21°F (-6°C)

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APPLICATION INSTRUCTIONS

CARBOMASTIC® 15 LOW ODOR

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION: Remove all oil or grease from the surface to be coated with Thinner 2 or Carboline Surface Cleaner 3 (refer to Surface Cleaner 3 instructions) in accordance with SSPC-SP 1.

Steel: NON-IMMERSION SERVICE: Power Tool or Hand Tool clean in accordance with SSPC-SP 11, SSPC-SP 3 or SSPC-SP 2 to produce a rust-scale free surface. Water blasting or Sweep Blast per SSPC-SP 7 is acceptable.

For new construction or more severe environments, abrasive blast to a Commercial Blast in accordance with SSPC-SP 6.

WATER IMMERSION SERVICE: Abrasive blast to a Near White Metal Finish in accordance with SSPC-SP 10 and obtain a 2-3 mil (50-75 micron) blast profile.

MIXING: Power mix each component separately, then combine and power mix in the following proportions:

| | <u>2 Gal Kit</u> | <u>10 Gal Kit</u> |
|--------------------------------|------------------|-------------------|
| CARBOMASTIC 15 LOW ODOR Part A | 1 gal | 5 gals |
| CARBOMASTIC 15 LOW ODOR Part B | 1 gal | 5 gals |

THINNING: May be thinned up to 32 oz/gal with Thinner 10. To extend pot life, may be thinned up to 32 oz/gal with Thinner 76.

Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and void product warranty, whether express or implied.

POT LIFE: 4 hours at 75°F (24°C) when thinned 32 oz/gal, 2 hours at 75°F (24°C) unthinned and 1 hour at 90°F (32°C) unthinned. Thinner 76 may be substituted to extend pot life to 2 hours at 90°F (32°C). Pot life ends when coating becomes too viscous to use.

APPLICATION CONDITIONS:

| | <u>Material</u> | <u>Surface</u> | <u>Ambient</u> | <u>Humidity</u> |
|---------|----------------------|----------------------|----------------------|-----------------|
| Normal | 65-85°F (18-29°C) | 65-85°F (18-29°C) | 65-85°F (18-29°C) | 35-80% |
| Minimum | 50°F (10°C) | 50°F (10°C) | 50°F (10°C) | 0% |
| Maximum | 90°F (32°C) | 50°F (54°C) | 50°F (38°C) | 95% |

Do not apply when surface temperature is less than 5°F or 3°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

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

Conventional: Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .086" I.D. fluid tip and appropriate air cap.

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CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

Airless:

| | |
|-----------------------|------------------|
| <i>Pump Ratio:</i> | 30:1 (min.)* |
| <i>GPM Output:</i> | 3.0 (min.) |
| <i>Material Hose:</i> | 3/8" I.D. (min.) |
| <i>Tip Size:</i> | .019-.025" |
| <i>Output psi:</i> | 1900-2100 |
| <i>Filter Size:</i> | 60 mesh |

*Teflon packings are recommended and are available from the pump manufacturer.

BRUSH OR ROLLER: Use clean natural bristle brush or medium nap phenolic core roller. Work coating into all irregularities.

DRYING TIMES: These times are based on a 5-7 mil (125-175 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.

Dry to touch: 5 hours at 75°F (24°C).

| <u>Surface Temperature</u> | <u>Between Coats</u> | <u>Final Cure</u> |
|----------------------------|----------------------|-------------------|
| 50°F (10°C) | 5 days | 15 days |
| 60°F (16°C) | 3 days | 10 days |
| 75°F (24°C) | 24 hours | 5 days |
| 90°F (32°C) | 18 hours | 3 days |

Minimum cure before immersion service is 5 days at 75°F (24°C). Final cure temperatures below 60°F (16°C) are not recommended for tank linings.

MAXIMUM RECOAT TIME:

30 days - Epoxies and water based coatings
90 days - Polyurethanes

If the maximum recoat time has been exceeded the surface must be abraded by sweep blasting prior to the application of any additional coats.

NOTE: This product contains conductive pigments and cannot be holiday tested.

VENTILATION & SAFETY: When used as a tank lining or 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. In addition to ensuring proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. Where flammable solvents exist, explosion-proof lighting equipment must be used. Hypersensitive persons should wear clean protective clothing, gloves and/or protective cream on face, hands and all exposed areas.

CLEANUP: Use Thinner 2.

CAUTION: READ AND FOLLOW ALL CAUTION STATEMENTS ON THIS PRODUCT DATA SHEET AND ON THE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.

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