

SELECTION & SPECIFICATION DATA

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| Generic Type | Solvent Based Organic Zinc-Rich Epoxy |
| Description | A high-solids, zinc-filled epoxy primer for corrosion protection of structural steel in highly corrosive environments including offshore, marine and industrial. This low VOC, HAPs compliant primer has quick cure-to-topcoat characteristics for in-shop applications and quick turnaround capabilities for the field. It has excellent adhesion and undercutting resistance and is outstanding for use as a corrosion resistant primer for a variety of applications. |
| Features | <ul style="list-style-type: none"> • Protects steel galvanically • Outstanding application properties • Cures at low temperatures down to 2°C • Tough and abrasion resistant film • Wide use in severe industrial or marine environments |
| Colour | Grey, and Green |
| Finish | Matte |
| Primer | Self Priming |
| Dry Film Thickness | 51 - 152 microns (2 - 6 mils) per coat Dry film thickness in excess of 200 microns per coat is not recommended. |
| Total Zinc Content in Dry Film | 84% by weight |
| Solids Content | By Volume 64% +/- 2% |
| Theoretical Coverage Rate | 25.2 m ² at 25 microns (1027 ft ² at 1.0 mils) 12.6 m ² at 50 microns (513 ft ² at 2.0 mils) 4.2 m ² at 150 microns (171 ft ² at 6.0 mils) Allow for loss in mixing and application. |
| VOC Values | As Supplied : 318 g/L These are nominal values. |
| Dry Temp. Resistance | Continuous: 177°C (350°F) Non-Continuous: 204°C (400°F) |
| Topcoats | Can be top coated with epoxies, polyurethanes, acrylics and others as recommended by your Carboline sales representative. |

SUBSTRATES & SURFACE PREPARATION

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| 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. |
| Steel | SSPC-SP6 (AS 1627.4 Sa 2) with a 25-75 micron surface profile. SSPC-SP 3 (AS 1627.2 St 3) for touch-up. |

Carbozinc 858 (3K)

PRODUCT DATA SHEET



MIXING & THINNING

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| Mixing | Power mix Part A completely. Then slowly sift in the zinc filler under agitation. Power mix Part B separately and add slowly to the mixture. Pour mixture through a 30 mesh screen. DO NOT MIX PARTIAL KITS. Tip: Sifting zinc through a window screen will aid in the mixing process by breaking up or catching dry zinc lumps. |
| Thinning | Normally not required but may be thinned up to 10% with Thinner #2 or Thinner #76. In hot or windy conditions, may be thinned up to 10% with Thinner #33. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. |
| Ratio | <u>7.06 Litre Kit</u> Part A: 3.66 litres Part B: 1.4 litres Zinc Filler: 2x 7 Kg (1L) bags |
| Pot Life | 4 hours at 24°C and less at higher temperatures. Pot life ends when coating loses body and begins to sag. |

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 (General) | The following spray equipment has been found suitable and is available from equipment manufacturers. Keep material under mild agitation during application. |
| Conventional Spray | Agitated pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" 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: 0.017-0.023" Output PSI: 2000-2200 Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer. |
| Brush | For small areas and touch-up only. Use medium bristle brush and avoid rebrushing. |
| Roller | Not recommended. |

APPLICATION CONDITIONS

| Condition | Material | Surface | Ambient | Humidity |
|-----------|-------------|--------------|--------------|----------|
| Minimum | 4°C (40°F) | 2°C (35°F) | 2°C (35°F) | 0% |
| Maximum | 32°C (90°F) | 49°C (120°F) | 43°C (110°F) | 95% |

Industry standards are for the 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. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

| Surface Temp. | Dry to Topcoat | Final Cure |
|---------------|----------------|------------|
| 2°C (35°F) | 8 Hours | 10 Hours |
| 10°C (50°F) | 5 Hours | 6 Hours |
| 24°C (75°F) | 2 Hours | 3 Hours |
| 32°C (90°F) | 1 Hour | 1 Hour |

These times are based on a 50% relative humidity and 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. Dry to touch at 75°F (24°C) is 30 minutes.

Specific topcoat products can be used in a much shorter re-coat interval. Consult Carboline for recommendations and test results.

Maximum Recoat: Unlimited. Must have a clean, dry surface for topcoating. "Loose" chalk or salts must be removed in accordance with good painting practice. Consult Carboline Technical Service for specific information.

CLEANUP & SAFETY

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| 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 SDS for this product. Employ normal workmanlike safety precautions. |
| 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. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel. |
| Caution | This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and rounded in accordance with the National Electric Code. In areas where explosion hazards exist workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes. |

PACKAGING, HANDLING & STORAGE

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| Shelf Life | Part A: 24 months at 24°C Part B: 24 months at 24°C Zinc Filler: 48 months at 24°C Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. For products/components exceeding the stated shelf life, contact Technical Services for further advice. |
| Storage Temperature & Humidity | 4° - 43°C 0-95% Relative Humidity |
| Flash Point (Setaflash) | Part A: 14°C Part B: 19°C Zinc Filler: NA |
| Shipping Weight (Approximate) | 7.06 Litre Kit - 21 Kg |
| Storage | Store Indoors. |

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PRODUCT DATA SHEET



WARRANTY

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