

Selection & Specification Data

Generic Type	Two component zinc-filled, cross linked epoxy primer.
Description	Low VOC organic zinc epoxy steel primer with quick cure-to-topcoat characteristics for in-shop applications and quick turnaround requirements in the field. Carbozinc 858 has very good adhesion and undercutting resistance and is excellent for use as a corrosion resistant primer for a variety of applications.
Features	<ul style="list-style-type: none"> • Ready to apply as supplied • Meets SSPC Paint System 20 • Fully complies with AS 3750.9:1994 Type 2 Organic Zinc Rich • Low temperature cure down to 2°C • Protects against undercutting corrosion • May be applied with standard airless or conventional spray equipment • VOC compliant to current AIM regulations
	<p>Approvals: NORSOK M-501, Rev. 5 System 1: ISO 20340: 1 coat Carbozinc 858 at 75 microns* *Under various approved intermediate and finish coatings – reference N.I.T, Oslo, Norway; Report N^o.s 3410-08-0007 Mt03, Mto6, Mt07, Mt08 & Mt09</p> <p>HSFG Bolted Structures: Meets Class A slip coefficient and creep testing criteria for use on faying surfaces.</p>
Gloss	Matte
Colour	Grey (formerly Blue)
Primers	Self priming
Topcoats	Can be topcoated with Epoxies, Polyurethanes, Acrylics and others as recommended by your Carboline sales representative.
Dry Film Thickness	50-150 microns. Dry film thickness in excess of 200 microns per coat is not recommended.
Solids Content	By Volume: 64% ± 2%
Zinc Content	By Weight: 85% ± 2% in dry film
Theoretical Coverage Rate	12.8 m ² /l at 50 microns 8.5 m ² /l at 75 microns Allow for loss in mixing and application
Mix Ratio	3:1 by volume (Part : Part B)
VOC Values	As Supplied: 370 g/l
Dry Temp. Resistance	Continuous:150°C Non-Continuous:200°C

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.
Steel	AS 1627.4 Class 2 (SSPC-SP6) with a 25-75 micron surface profile. Hand or power-tool clean SSPC-SP2 or SP3 for touch-up.
Galvanized Steel Repair	Hand or power-tool clean SSPC-SP2 or SP3 for touch-up

Application Equipment

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. **General Guidelines:**

Spray Application (General)	The following spray equipment has been found suitable and is available from manufacturers such as DeVilbiss and Graco. Keep material under mild agitation during application.												
Conventional Spray	Agitated pressure pot equipped with dual regulators, 9mm (3/8") I.D. minimum material hose, 1.8mm (.070") I.D. fluid tip and appropriate air cap.												
Airless Spray	<table border="0"> <tr> <td>Pump Ratio:</td> <td>30:1 (min.)*</td> </tr> <tr> <td>Output:</td> <td>10 l/min. (min.)</td> </tr> <tr> <td>Material Hose:</td> <td>9mm (3/8") I.D. (min.)</td> </tr> <tr> <td>Tip Size:</td> <td>.017-.023"</td> </tr> <tr> <td>Output PSI:</td> <td>2100-2500</td> </tr> <tr> <td>Filter Size:</td> <td>60 mesh</td> </tr> </table> *Teflon packings are recommended and available from the pump manufacturer.	Pump Ratio:	30:1 (min.)*	Output:	10 l/min. (min.)	Material Hose:	9mm (3/8") I.D. (min.)	Tip Size:	.017-.023"	Output PSI:	2100-2500	Filter Size:	60 mesh
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Brush	For small areas and touch-up only. Use medium bristle brush and avoid rebrushing.												
Roller	Not recommended												

Mixing & Thinning

Mixing Power mix Part A and Part B separately, then combine and power mix for a minimum of two minutes.

Ratio 3:1 by volume (Part A : Part B)

	8 litre kit	1 lt kit
Part A:	6 litres (part full 10 litre pail)	0.75 lt
Part B:	2 litres	0.25 lt

Thinning Normally not required but may be thinned up to 6% (480 ml / 8 litre kit) with Thinner #2. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life 4 Hours at 24°C and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

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 vapour 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 grounded in accordance with the local electric code. In areas where explosion hazards exist, workmen should be required to use nonferrous tools and wear conductive and nonsparking shoes.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	16°-29°C	16°-32°C	16°-32°C	0-90%
Minimum	4°C	2°C	2°C	0%
Maximum	32°C	49°C	43°C	95%

Industry standards are for the substrate temperatures to be 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

Dry to touch at 24°C is 30 minutes

Surface Temp. & 50% Relative Humidity	Dry to Handle	Dry to Topcoat
2°C	8 hours	10 hours
10°C	5 hours	6 hours
24°C	2 hours	3 hours
32°C	1 hour	1 hour

These times are based on a 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: 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.

FORCE CURE INFORMATION

Flash Off	Bake Time	Cool Down	Total
Convection Oven			
20 min	30 min - 65°C	20 min	70 min
Infra-Red Oven			
10 min	15 min - 65°C	15 min	40 min

Times and substrate temperatures shown are based on in-house testing and will vary depending on oven type, as well as substrate size and type.

Packaging, Handling & Storage

Pack Sizes 8 litre & 1 litre – 2 component kit
Part A: 6 litre (part full 10 litre pail)
Part B: 2 litre

Flash Point (Setaflash) Part A: 9°C
 Part B: 3°C

Storage Temperature & Humidity Store under cover. KEEP DRY
 4° - 43°C.
 0-95% Relative Humidity

Shelf Life Part A: Min. 12 months at 24°C
 Part B: Min. 12 months at 24°C

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

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