Carbozinc® 11

Application Equipment

Spray Application (General)
The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco. Keep material under mild agitation during application. If spraying stops for more than 10 minutes, recirculate the material remaining in the spray line. Do not leave mixed primer in the hoses during work stoppages.

Conventional Spray
Agitated pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, with a maximum length of 50', .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:	.019-.023"
Output PSI:	1500-2000
Filter Size:	60 mesh

Teflon packings are recommended and available from the pump manufacturer.

Brush
For touch-up of areas less than one square foot only. Use medium bristle brush and avoid rebrushing.

Roller
Not recommended

Mixing & Thinning

Mixing
Power mix base, then combine and power mix as follows. Pour zinc filler very slowly into premixed base with continuous agitation. Mix until free of lumps. Pour mixture through a 30 mesh screen. DO NOT MIX PARTIAL KITS.

Ratio

	1 Gal Kit	5 Gal Kit
Part A:	.75 gal.	3.75 gals.
Zinc Filler:	14.6 lbs	73 lbs

Thinning
May be thinned up to 5 oz/gal (4%) with #26 for ambient and warm surfaces. For extremely warm or windy conditions, may be thinned up to 5 oz/gal (4%) with #33. In cool weather (below 60°F (16°C)), thin up to 7 oz/gal (6%) with #21. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life
8 Hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating becomes too viscous to use.

Cleanup & Safety

Cleanup
Use #21 Thinner or Isopropyl Alcohol. 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 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, 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 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.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	40°-95°F (4°-35°C)	40°-110°F (4°-43°C)	40°-95°F (4°-35°C)	40-60%
Minimum	0°F (-18°C)	0°F (-18°C)	0°F (-18°C)	30%
Maximum	130°F (54°C)	200°F (93°C)	130°F (54°C)	95%

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. & 50% Relative Humidity	Dry to Handle	Dry to Topcoat	Dry to Immersion Service
0°F (-18°C)	4 Hours	7 Days	NR
40°F (4°C)	1 Hour	48 Hours	72 Hours
60°F (16°C)	¾ Hour	24 Hours	48 Hours
80°F (27°C)	¾ Hour	18 Hours	18 Hours
100°F (38°C)	¼ Hour	16 Hours	14 Hours

These times are based on a 3.0-4.0 mil (75-100 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. Humidity levels below 50% will require longer cure times. **Notes**: Any salting that appears on the zinc surface as a result of prolonged weathering exposure must be removed prior to the application of additional coatings. Also, loose zinc must be removed from the cured film by rubbing with fiberglass screen wire if: 1) The Carbozinc 11 is to be used without a topcoat in immersion service and "zinc pick up" could be detrimental, or 2) When "dry spray/overspray" is evident on the cured film and a topcoat will be applied. For **accelerated curing or where the relative humidity is below 40%**, allow an initial 2-hour ambient cure followed by misting with water or steam to keep the coated surface wet for a minimum of 8 hours and until the coated surface achieves a "2H" pencil hardness per ASTM D3363.

Packaging, Handling & Storage

Shipping Weight (Approximate)

1 Gallon Kit	5 Gallon Kit
23 lbs (10 kg)	113 lbs (51 kg)

Flash Point (Setaflash)
Part A: 55°F (13°C)
Zinc Filler: NA

Storage (General)
Store Indoors.

Storage Temperature & Humidity
40° -100°F (4-38°C).
0-90% Relative Humidity

Shelf Life
Part A: 12 months at 75°F (24°C)
Zinc Filler: 24 months at 75°F (24°C)

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