

SELECTION & SPECIFICATION DATA

Generic Type	Shop primer self-curing Inorganic Zinc Silicate with Zinc in paste version
Description	A weldable preconstruction inorganic zinc primer, used in shipyards and constructions workshops, Carboweld 11 P does not affect quality, speed of welding and cutting operations. Certified by most certification bodies. Contact Carboline Thechnical Service for any further information.
Features	• Protects at least to 6 month in normal atmospheric environments. • Weld spatter does not adhere to or damage the coating. • Can be welded as quickly and easily as bare steel at production line speeds without loss in strength or consistency of the weld. • Dries to touch and handle in 3 to 5 minutes. • Compliant to IMO MSC.215(82) as shop primer for ballast tank coatings systems.
Color	Grey
Finish	Flat
Primer	Self priming
Dry Film Thickness	18 µm
Solid(s) Content	By Volume: 20 ± 2 % By Weight: 48 ± 2 %
Theoretical Coverage Rates	11.11 m ² /l at 18 µm Allow for loss in mixing and application
Dry Temp. Resistance	<u>Untopcoated:</u> Continuous: 400°C (750°F) Non-Continuous: 430°C (800°F)
Limitations	Do not use for Immersion service and exposure to acid, alkalies or solutions outside a pH range of 5–10, without a suitable topcoat.
Topcoats	Can be topcoated with Epoxies, Acrylics, High-Heat Silicones and other as recommended by your Carboline Technical Service. Do not apply paints with saponifiable binder.
Density	1.35 kg/lit

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, according with SSPCSP1.
Steel	Abrasive blast to a Near White Metal Finish in accordance with ISO 8501-1 SA 2½ minimum and obtain 9-15 microns (Ra) blast profile. For steel parts used in ballasts, IMO Resolution MSC.215(82) requires that contamination by soluble salts does not exceed a concentration equivalent to 50 mg/m² of sodium chloride measured in accordance with ISO 8502-9. The amount of dust must not exceed level 1 according to ISO 8502-3 and particle sizes 3, 4 or 5.

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MIXING & THINNING

Mixing | Agitate Part A separately, then combine and power mix as follows. Pour very slowly the premixed vehicle into the zinc paste with continuous agitation. Mix until free of lumps. Pour mixture through a 30 mesh screen.
DO NOT MIX PARTIAL KITS.

Thinning | Normally none, may be thinned up to 5% by volume, with Thinner N°33 for hot or windy conditions. In cool weather, below 16°C, thin up to 5% by volume, with Thinner N°21.
Use of thinners than those supplied by Carboline, may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio | By weight:
Zinc Paste (A): 55%
Vehicle (B): 45%

Pot Life | 36 hours at 20°C
18 hours at 30°C
less at higher temperatures.
Pot life ends when coating becomes too viscous to use.

Induction Time | 5 minutes

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.

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 15 minutes, recirculate the material remaining in the spray line. Do not leave mixed product in the hoses during work stoppages.

Conventional Spray | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.70 I.D. fluid tip and appropriate air cap. Maximum material hose length of 15mt. Keep pot at same level as application.

Airless Spray | Pump Ratio: 30:1 (min.) *
Output: 11.5 liters/min.
Material Hose: 3/8" I.D. (min.)
Tip Size: 0.017-0.021"
Output PSI: 1500-2000 (100-140ATM)
Filter Size: 60 mesh

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

Brush | For touch up of areas less than 0.4 m2 only. Use medium bristle brush and avoid re-brushing.

Roller | Not Recommended.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	0°C (32°F)	0°C (32°F)	-15°C (5°F)	30%
Maximum	50°C (122°F)	50°C (122°F)	50°C (122°F)	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.	Between Coats	Tack Free	Dry Hard
20°C (68°F)	24 Hours	5 Minutes	10 Minutes
40°C (104°F)	24 Hours	60 Seconds	3 Minutes

These times are based on a 18 µm dry film thickness / 70% minimum HR.

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.

CLEANUP & SAFETY

Cleanup | Use Thinner#21 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 SDS 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 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 solvent 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 nonferrous tools and wear conductive and nonsparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life | Vehicle: 12 months at 24°C (75°F)
Zinc Paste: 12 months at 24°C (75°F)

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

Storage Temperature & Humidity | 4° - 43°C (40 - 110 °F)
0-100% HR

Flash Point (Setaflash) | < 21°C

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PACKAGING, HANDLING & STORAGE

Storage | Store Indoors.

Packaging | Net Weight:
Zinc Paste (A): 16,5 Kg
Vehicle (B): 13,5 Kg

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.