

## SELECTION DATA

**GENERIC TYPE:** Single package, modified silicone.

**GENERAL PROPERTIES:** Single package coating that withstands continuous temperatures of 540°C and surges up to 650°C. Only one coat is required, but may be applied over Carbozinc 11 ZA base coat for superior performance. A Carbozinc 11 ZA base coat prevents rusting of steel and rust streaks during shutdown or when operating temperature falls below 93°C.

**RECOMMENDED USES:** Recommended for coating stacks, furnaces, hot piping, mufflers, exhausts and other elevated temperature steel surfaces in any industry, including marine. Generally used where temperatures exceed 260°C.

**NOT RECOMMENDED FOR:** Immersion service or exposure to splash and spillage of acids and alkalis.

### CHEMICAL RESISTANCE GUIDE:

<u>Exposure</u>	<u>Splash &amp; Spill</u>	<u>Fumes</u>
Acids	Fair	Fair
Alkalis	Poor	Fair
Solvents	Good	Good
Salt	Good	Very good
Water	Good	Very good

### TEMPERATURE RESISTANCE (non-immersion):

Continuous	540°C
Non-continuous	650°C

**FLEXIBILITY:** Good

**WEATHERING:** Excellent

**ABRASION RESISTANCE:** Good

**SUBSTRATES:** Carbon steel or others as recommended.

**TOPCOAT REQUIRED:** None required.

**PRIMER REQUIRED:** For steel, an inorganic zinc primer is recommended. None required for stainless steel or aluminium.

**COMPATIBILITY WITH OTHER COATINGS:** May be applied over inorganic zincs such as Carbozinc 11 ZA. Excessive film thicknesses of Thermaline 4631 ZA over inorganic zincs may result in blistering and delamination when the temperature is increased.

## SPECIFICATION DATA

### THEORETICAL SOLIDS CONTENT:

Thermaline 4631 ZA	<u>By Volume</u> 30% ± 2%
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**RECOMMENDED DRY FILM THICKNESS PER COAT:**  
40 Microns

Two coats are recommended over steel and one coat over inorganic zincs.

### THEORETICAL COVERAGE: \*

7,5m<sup>2</sup>/lt at 40 microns

\* **NOTE:** Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

**SHELF LIFE:** 12 Months minimum when stored at 25°C.

**COLOURS:** Aluminium only.

**GLOSS:** Not applicable.

## ORDERING INFORMATION

Prices may be obtained from StonCor Africa Sales Representative or Main Office.

### SHIPPING WEIGHT:

Thermaline 4631 ZA	<u>5L</u> 6,4kg
Carboline Thinner # 10	4,9kg

### FLASH POINT (Pensky-Martens Closed Cup):

Thermaline 4631 ZA	21°C
Carboline Thinner # 10	24°C

March 2012 SA replaces June 2010 SA

## APPLICATION INSTRUCTIONS

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 any oil or grease from surface to be coated prior to abrasive blast or power tool cleaning.

**STEEL:** For best results, a near white metal finish in accordance with ISO 8501 Sa2½ is recommended. Performs well over a mechanically cleaned surface. All surfaces must be free of dust and grease before application. Carbozinc 11 ZA must be properly cured before application of Thermaline 4631 ZA.

**MIXING:** Mix to a uniform consistency before thinning.

**THINNING:** Thin up to 12% by volume with Carboline Thinner # 10.

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

### APPLICATION TEMPERATURES:

	<u>Material</u>	<u>Surfaces</u>
Normal	21°C	24°C
Minimum	5°C	5°C
Maximum	32°C	43°C

	<u>Ambient</u>	<u>Humidity</u>
Normal	24°C	10-80%
Minimum	5°C	0%
Maximum	43°C	95%

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

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

**SPRAY:** Use adequate air volume for correct operation.

Use a 50% overlap with each pass of the gun. On irregular surfaces, coat edges first, making an extra pass later.

**NOTE:** The following equipment has been found suitable, however equivalent equipment may be substituted.

**CONVENTIONAL:** Use 10mm minimum I.D. material hose. Hold gun approximately 200-250mm from the surface and at a right angle to the surface.

<u>Mfr &amp; Gun</u>	<u>Fluid Tip</u>	<u>Air Cap</u>
Binks # 18 or # 62	63B	63PB
DeVilbiss P-MBC or JGA	FX (approx .046")	704

**AIRLESS:** Use 10mm minimum I.D. material hose. Hold gun approximately 300-350mm from the surface and at a right angle to the surface.

<u>Mfr &amp; Gun</u>	<u>Pump *</u>
DeVilbiss JGS-510	QFA-519 32:1
Graco 205-641	Bulldog 30:1
Binks Model 700	B5-18 or B8-36

Use .013-.015" tip with 2200 psi (152 Bar)

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

**BRUSH OR ROLLER:** Spray is recommended. For small areas or touch up, use natural bristle brush applying with full strokes. Avoid rebrushing. Use short nap mohair roller with phenolic core.

### DRYING TIMES BETWEEN COATS:

<u>Temperature</u>	
10°C	16 Hours
16°C	8 Hours
24°C	4 Hours
32°C	2 Hours

**CLEAN UP:** Use Carboline Thinner # 2.

### STORAGE CONDITIONS:

Temperature	4-43°C
Humidity	0-100%

**CAUTION: MAY CONTAIN 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 ELECTRONIC 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.



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