

**SELECTION & SPECIFICATION DATA**

<b>General Paint Name</b>	Modified silicone resin paint
<b>Generic Type</b>	Silicone resin
<b>Description</b>	Silicone resin topcoat with excellent heat resistance. Generally applied over items with operating temperature of 260°C or higher. "Carbozinc 11" is recommended as a primer in order to enhance corrosion resistance, especially during shutdown or when operating temperature falls below 93°C. Recommended for the use for exterior of such structures subjected to high temperature as piping, stacks, heat exchangers, tanks, and so on.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Temperature resistance up to 540°C (continuous), or 650°C (non-continuous)</li> <li>• Excellent resistance to thermal shock between 0°C and 540°C</li> <li>• Excellent quick-drying characteristics</li> <li>• Single component</li> </ul>
<b>Color</b>	Aluminum
<b>Primer</b>	Carbozinc 11 or direct to substrates. A mist coat may be required to minimize bubbling over inorganic zinc-rich paints. When applying over inorganic zinc-rich paints, excessive (above 30 microns) DFT of this product may cause blisters at initial heating process.
<b>Solid(s) Content</b>	By Volume 31% +/- 2%
<b>Solids Content</b>	By Weight 48% +/- 2%
<b>Density</b>	1.15 +/- 0.03 g/ cm <sup>3</sup>
<b>VOC Values</b>	<b>As Supplied</b> : 595 g/ L

Application Method	Dry Film Thickness (microns/coat)	Theoretical Coverage Rate (g/m <sup>2</sup> )	Practical Coverage Rate (g/m <sup>2</sup> )*
Spray	25	93	140
Brush	20	74	100

\*: Practical Coverage Rates are estimates based on average results. Individual results may vary based on several issues including the shape and location of the item being painted as well as environmental conditions like temperature, humidity and wind. The skill level of those applying the paint will also impact the final results. For details, consult Japan Carboline staff.

<b>Wet/ Dry (As Supplied)</b>	3.18
<b>Sag Resistance (Dry)</b>	31 microns
<b>Dry Temp. Resistance</b>	Continuous: 540°C (1004°F) Non-Continuous: 650°C (1202°F)
<b>Limitations</b>	Not recommended for immersion in or exposure to acids or alkalis.

**SUBSTRATES & SURFACE PREPARATION**

**General** | Remove any oil or grease from surface to be coated with clean rags soaked in an adequate solvent.

# Thermaline 4635

## PRODUCT DATA SHEET



### MIXING & THINNING

**Mixing** | Prior to application, power mix until uniform consistency.

**Thinning** | Use of Carboline Thinner 10J is recommended.  
Use of thinners other than those supplied or recommended by JAPAN CARBOLINE may adversely affect product performance.

### 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.

**Application Tool** | Airless spray, Air spray, Brush

**Airless Spray**

- Pump Ratio: 30 : 1
- Output Pressure: 8-12 MPa
- Tip Size: 0.013-0.015"
- Filter Size: 50 Mesh (if needed)
- Thinning: up to 10 weight %
- Appropriate Viscosity: 30-50 sec. (IHS Cup)

### APPLICATION CONDITIONS

Condition	Surface	Ambient	Humidity
Minimum	4°C (39°F)	4°C (39°F)	0%
Maximum	50°C (122°F)	43°C (109°F)	85%

### CURING SCHEDULE

Surface Temp.	Minimum Recoat Time
5°C (41°F)	12 Hours
10°C (50°F)	8 Hours
20°C (68°F)	4 Hours
30°C (86°F)	2 Hours

These times are based on 25 microns of 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.

**Final Cure:** To obtain optimal properties, must be heat-cured at 180°C. Allow temperature to increase slowly to 180°C, and hold at 180°C for 6 hours.

### PACKAGING, HANDLING & STORAGE

**Shelf Life** | 12 months (when kept in original unopened containers)

**Storage** | Store indoors.

**Packaging** | 16 kg kit or 4 kg kit

**Flash Point (Setaflash)** | Thermaline 4635: 18°C  
Carboline Thinner 10J: 23°C

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## UPDATE INFORMATION

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**Last Modified** | June, 2022

**Control Number** | PDS043-013

## WARRANTY

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