

### KEY FEATURES:

- **Easy One-Coat Application:** Self-priming single coat with minimal surface preparation (no abrasive blasting or profiling required) therefore - less time and labour costs
- **Advanced Performance:** Long-lasting protection from corrosion (stops rust creep)
- **Cost Effective:** Apply less product (8-12 mils DFT) for superior protection
- **Flexibility:** High elasticity allows for flexibility of coating and allows for thermal expansion and contraction of surfaces

Si-COAT® 581™ CM is a single component, moisture cure, room temperature vulcanizing (RTV) silicone coating that provides long-lasting protection from corrosion in above grade atmospheric applications in retrofit projects. Typical applications include structural steel, bridges, machinery and equipment, areas with heavy corrosion, tank exteriors, metal roofs, cladding, etc. Si-COAT® 581™ CM is ideal where coverage is essential and high levels of protection, adhesion, elasticity and longevity are desired.

### COLOUR

Only available in Clear.

### PRODUCT CHARACTERISTICS AND PRACTICAL INFORMATION

Gloss Level	Semi-gloss
Volume Solids	72%
Typical Thickness	7 ± 2 mil (127 to 229 micron) dry film thickness (DFT).
Application Rate	7 to 13 mil (176 to 318 microns) wet film thickness (WFT).

### Approximate Theoretical Coverage

DFT	5 mils (127 µ)	9 mils (229 µ)
sq. ft/US gal	231	128
sq. m/L	5.7	3.1

### Allow appropriate loss factor:

**Practical Coverage** = Theoretical Coverage x [100% - Loss%].  
Coverage will vary with the substrate and porosity of surface.

**Method of Application:** Specialized spray equipment, brush or roller

**Application Temperature Range:** 41 to 140°F (5 to 60°C) [ambient]

### Drying Time:

Skin-over Time	20-30 minutes*
Tack-free Time	60 minutes*
Cure Through	4 to 6 hours*
Full Physical Characteristics	7 days*

\*At standard conditions [77°F (25°C) and 50% relative humidity – 10 mils wet film thickness]

### REGULATORY DATA

Flash Point	104°F (40°C) minimum
VOC	1.83 lb/US gallon (219 g/liter)

### PHYSICAL PROPERTIES

(Typical properties - values not to be used as specifications)

Uncured	
Appearance	Thick Paint
Viscosity	5,000 ± 2,000 cP
Sag	20 minimum (Leneta Anti-Sag Meter)
Cure System	Neutral, moisture cure
Cured At Standard Conditions* for 7 Days	
Durometer Hardness (ASTM D2240, Shore A)	35 points

Tensile Strength (ASTM D412)	200 psi (14 kg/cm <sup>2</sup> )
Elongation at Break (ASTM D412)	230%
Temperature Stability	Continuous: -76 to 392°F (-60 to 200°C)

\*At standard conditions 77°F (25°C) and 50% relative humidity

### APPLICATION

**Mixing:** Si-COAT® 581™ CM is supplied as a one-part coating (no component mixing necessary). **Mix by an air powered agitator (300 – 400 rpm) for a minimum of 5 minutes**, to ensure an even consistency of coating is obtained without air in suspension.

**Application:** All surfaces should be clean and dry prior to application. The coating should be applied in a manner that prevents runs, sags, drips, spills, etc. and that completely covers surfaces without holidays (gaps). The temperature of the surface to be coated should be between 41 and 140°F (5 and 60°C) and environmental & substrate temperature should be at least 5°F (3°C) above the dew point prior to and during application.

All areas particularly prone to corrosion such as bare metal, edges, welds, holes, bolts, corners, pits and rough areas should be spot- primed with 5 mils (127 microns) DFT of Si-COAT® 581™ CM.

The entire structure should be top coated with a minimum 8.0 mil (203 micron) to 20.0 mil (508 micron) DFT of Si-COAT® 581™ CM, depending on surface conditions. The maximum advisable DFT of Si-COAT® 581™ CM is 100 mil (2,540 micron).

When working with Si-COAT® 581™ CM in high humidity and/or high temperature environments, it is recommended to use a pail lid adapter fitted with an agitator. This will prevent the product from skinning over and curing in the pail during application.

It is recommended that Si-COAT® 581™ CM is applied using an airless sprayer; however, brush, or roller are also suitable methods of application for small surface areas, at a rate that will achieve a minimum of 8 mils (203 µ) DFT.

**Thinner:** Not recommended.

**Cleaner:** Naphtha or odorless mineral spirits.

**Work Stoppages & Restarts:** Work stoppages are not recommended with only partial utilization of a container of Si-COAT® 581™ CM. If work must stop after only a portion of a container of Si-COAT® 581™ CM is used, seal to minimize air and moisture contact with the coating by covering the surface of the coating with a sheet of polyethylene film, then reseal the container to be airtight.

Upon reopening the container to restart work, peel back the polyethylene film. If curing of the coating has occurred, use a utility knife to cut the cured coating away from the wall of the container. Peel away the cured layer of coating to expose fresh coating underneath.

**Clean-up:** Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with cleaner as selected from above.

Fully cured coating is environmentally benign (will not harm) and is suitable for landfill disposal. However, always check local environmental regulations before disposal.

### PRODUCT CHARACTERISTICS

Surface finish is dependent on application method. Avoid using a combination of application methods whenever possible. Superior aesthetic appearance will be obtained with airless spray application.

If over coating Si-COAT CM after prolonged weathering or ageing, ensure the coating is fully cleaned to remove all surface contamination such as dust, grease, oil, salt crystals, traffic fumes, etc. before application of a further coat of Si-COAT CM.

Do not apply to substrate temperatures below 41°F (5°C). When applying Si-COAT CM in confined spaces ensure adequate ventilation and/or respiratory equipment is available.

Consult the Si-COAT® 581™ CM SDS for further details.

Si-COAT CM has excellent tolerance to airborne chemical exposure. When severe chemical or solvent splashing/pooling is likely to occur please contact CSL Silicones Inc. for information regarding suitability.

## SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given in this document, the Safety Data Sheet (SDS) and the container(s), and should not be used without reference to the SDS that CSL Silicones Inc. has provided to its customers.

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards & regulations.

If in doubt regarding the suitability of use of this product, consult CSL Silicones Inc. for further advice.

## PACKAGING

Size (unit)	Product Volume
1 US gal	1.0 US gal (3.8 L)
5 US gal	5.0 US gal (18.9 L)

## STORAGE

**Shelf Life:** 12 months from date of manufacture in the original unopened container below 90°F (32°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat or ignition.

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### Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this document without first obtaining written confirmation from CSL Silicones Inc. as to the suitability of the product for the intended purpose does so at his/her own risk. The information contained herein has been prepared in good faith to comply with applicable federal and provincial (state) law(s). However, no warranty of any kind is given or implied and CSL Silicones Inc. will not be responsible for any damages, losses or injuries that may result from the use of any information contained herein. While CSL endeavors to ensure all advice it gives about the product (whether in this document or otherwise) is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless CSL specifically agrees in writing to do so, it does not accept any liability whatsoever or howsoever arising for the performance of the product, or for any consequential loss or damage arising out of the use of the product. Any warranty, if given or specific Terms & Conditions of Sale are contained in CSL's Terms & Conditions of Sale, a copy of which can be obtained upon request. The information contained herein is liable to modification from time-to-time in light of experience and CSL's policy of continuous product improvement. It is the user's responsibility to check that this document is current prior to using the product. This document must not be used for specification writing.

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