

---

# Technical Data Sheet

Si-COAT® 532™

Low VOC Anti-Graffiti Protective Coating - Clear

## 1 Introduction

Si-COAT® 532™ Low VOC anti-graffiti protective coating is a clear, semi-gloss, permanent (non-sacrificial) single application anti-graffiti protective coating suitable for use over metal, concrete, brick, stone, wood, fiberglass and some pre-existing coatings. This single component, room temperature vulcanizing (RTV), moisture cure polysiloxane product provides excellent durability and long service life.

As a result of its specific chemistry, Low VOC Si-COAT® 532™ forms chemical bonds with the host surface to enhance adhesion properties without the need for abrasive blasting, priming, and extensive site preparation.

Due to the hydrophobicity of the coating, most graffiti-tagging can easily be removed from protected surfaces using water under low pressure - 1200 psi.

For best results, Graffiti tagging should be removed from the Si-COAT® 532™ coating as soon as possible using a regular cold water pressure washer. In the instance that graffiti has been left on for a longer time period (greater than 10 days) and is stubborn to remove with cold water then a warm water pressure wash may be necessary.

In the extremely rare instance that stubborn graffiti media (specialty paints with adhesion primers that have been left to cure for extended periods of time) is not removed 100% with warm water then apply a commercially available alkaline based cleaner and rinse off immediately.

***Note:** Before applying alkaline cleaner to the coating, test a small patch in an inconspicuous area. Contact CSL Silicones Inc. for information and/or recommendations on which cleaners are most suitable for specific problems.*

---

## 2 Product Description

A single component, room temperature vulcanizing (RTV), moisture cure, polysiloxane coating giving excellent color, durability and long service life.

---

## 3 Intended Uses

Suitable for use in applications where a surface needs to be protected from graffiti, as most marking media can be easily removed from the coated surface due to its hydrophobic properties. Si-COAT® 532™ is suitable for use over metal, concrete, brick, stone, wood, fiberglass and pre-existing coatings. Test patches should be performed as product may have a darkening effect on some surfaces.

---

## 4 Practical Information

Color: Clear  
 Gloss Level: Semi-gloss  
 Volume Solids: 94%  
 VOC: 45.55 g/litre  
 Typical Thickness: 8 to 10 mil (203 to 254 micron) dry film thickness (DFT).  
 Application Rate: *Equivalent to...*  
 ~9 to ~11 mil (~216 to ~270 microns) wet film thickness (WFT).  
*Application thickness is dependent on intended washing frequency. A minimum of 8 mils (203µ) DFT is recommended.*

Approx. Theoretical Coverage

DFT	8 mils (203 µ)	10 mils (254 µ)
sq. ft/US gal	189	151
sq.m/L	4.6	3.7

Allow appropriate loss factor:

$$\text{Practical Coverage} = \text{Theoretical Coverage} \times [100\% - \text{Loss}\%]$$

Method of Application:

Airless spray, brush or roller

Temperature Range

41 to 140°F (5 to 60°C) [ambient]  
 41 to 266°F (5 to 130°C) [substrate]

Drying Time:

Skin-over Time	45 minutes*
Tack-free Time	60 - 90 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]

## 5 Regulatory Data

Flash Point: 104°F (40°C) minimum  
 Product Weight: 8.26 lb/US gallon (0.99 kg/liter) minimum  
 VOC: 0.38 lb/US gallon (46 g/liter) maximum

## 6 Physical Properties

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

<b>UNCURED</b>	
Appearance	Thick Paint
Viscosity	1600 cP
Cure System	Neutral, moisture cure
<i>Cured At standard conditions [ 77°F (25°C) and 50% relative humidity] for 7 days</i>	
Hardness	33 (ASTM D2240, Shore A)
Tensile Strength	100 psi (4.9 kg/cm <sup>2</sup> ) (ASTM D412)
Elongation at Break	100% (ASTM D412)
Temperature Stability	Continuous: -40 to 392°F (-40 to 200°C)

## 7 Surface Preparation & Surface Cleanliness

All surfaces to be coated should be free of dirt, dust, chalking paint, mortar spatter, all loose rust, all loose mill scale, old caulking, grease, oil, release agents, curing compounds, laitance and other foreign matter including frost. Any paint that is peeling, flaking, cracking, blistering or lifting must be removed. Old coating that does not meet ASTM standard D3359 ("Measuring Adhesion by Tape Method") with a minimum rating of 4A or 4B must be removed. All edges of old coating must be feathered down to remove the sharp edge.

In order to achieve the above conditions, the *suggested* surface preparation standards are SSPC-SP2 (hand tool cleaning), SSPC-SP3 (power tool cleaning) or SSPC-SP12/NACE No. 5 (water jetting/blasting).

For surfaces prepared by water jetting/blasting, the SSPC-VIS 4(I)/NACE No. 7 standards for surface cleanliness should be followed.

The visual surface cleanliness must conform, at minimum, to the Vis WJ-4 condition directly after water jetting/blasting.

Non-visual surface cleanliness must conform, at minimum, to the SC-2 condition with a provision for up to 7 ppm (10 µg/cm<sup>2</sup>) chloride contamination. Soluble ferrous ion levels should be below 7 ppm (10 µg/cm<sup>2</sup>) and sulfate contamination less than 12 ppm (17 µg/cm<sup>2</sup>).

Flash rusting may occur after water jetting/blasting. As per the SSPC-VIS 4(I)/NACE No. 7 standard, the maximum flash rusting condition tolerable is L (light flash rusting that is evenly distributed or in patches, very tightly adherent and not heavy enough to mark objects rubbed/brushed against it).

Hence, the overall visual/non-visual surface condition after water jetting/blasting is WJ-4 L/SC-2 (with a provision for up to 7 ppm (10 µg/cm<sup>2</sup>) chloride contamination).

---

## 8 Coating Application

Mixing	Si-COAT® 532™ is supplied as a one-part coating (no component mixing necessary). However, since the coating is a thixotropic gel it is necessary to <u>mix by an air powered agitator (300 – 400 rpm) for a minimum of 5 minutes</u> , to insure an even consistency of coating is obtained without air in suspension.
Application	<p>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 266°F (5 and 130°C) and environmental temperature should be at least 5°F (3°C) above the dew point prior to and during application.</p> <p>When working with Si-COAT® 532™ 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.</p> <p>It is recommended that Si-COAT® 532™ is applied using an Airless Sprayer; however, Brush, or Roller are also suitable methods of application for small surface areas. It is necessary to apply at a rate that will achieve a minimum of 8 mils (203µ) DFT. Roller and brush application will require multiple coats to achieve desired DFT.</p>
Thinner	Not recommended. <i>Thinners may inhibit the curing mechanism of the coating.</i>
Cleaner	Naphtha, Odorless Mineral Spirits or MEK.
Work Stoppages & Restarts	<p>Work stoppages are not recommended with only partial utilization of a container of Si-COAT® 532™.</p> <p>If work must stop after only a portion of a container of Si-COAT® 532™ 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.</p> <p>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.</p>
Clean-up	<p>Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with cleaner as selected from above.</p> <p>Fully cured coating is environmentally benign (will not harm) and is suitable for landfill disposal. However, always check local environmental regulations before disposal.</p>

## 9 Product Characteristics

Surface finish and level of sheen is dependent on application method. Avoid using a combination of application methods whenever possible. Superior aesthetic appearance will be obtained with airless spray application. Condensation occurring during or immediately following application may result in a matte finish.

If over coating your Si-COAT® 532™ 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® 532™.

Do not apply to substrate temperatures below 41 °F (5 °C).

When applying Si-COAT® 532™ in confined spaces ensure adequate ventilation and/or respiratory equipment is available. Consult the Si-COAT® 532™ MSDS for further details.

Si-COAT® 532™ 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.

## 10 Systems Compatibility

Primer is not needed prior to applying Si-COAT® 532™ to most common substrates. A field adhesion test is recommended prior to application, especially on painted surfaces.

## 11 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 Material Safety Data Sheet (MSDS) and the container(s), and should not be used without reference to the MSDS 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.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes may be emitted that will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

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

## 12 Packaging

	Product Volume	Product Weight	Shipping Weight
<i>Package Size</i>			
1 US gal unit	1.0 US gal (3.8 liter)	8.2 lb (3.7 kg)	9.4 lb (4.26 kg)
5 US gal unit	5.0 US gal (18.9 liter)	41.2 lb (18.7 kg)	44.5 lb (20.2 kg)

## 13 Storage

Shelf Life

Minimum 12 months from date of manufacture at 90°F (32°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat or ignition.

### 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.*

CSL Silicones Inc.

144 Woodlawn Road West  
Guelph, ON N1H 1B5  
CANADA

Toll Free: 800 265 2753

Tel: 519 836 9044

Fax: 519 836 9069

[www.cslsilicones.com](http://www.cslsilicones.com)

