

Si-COAT® 570™ & 570hs™ | RTV Silicone High Voltage Insulator Coating

Packaging

	1 US gal can	5 US gal pail
570	4.3 kg	21.4 kg
570hs	4.8 kg	24.0 kg

Shelf Life

When stored in the original unopened container at or below 90°F (32°C) Si-COAT 570 & 570hs have a shelf life of 12 months from the date of manufacture.

Application Temperature Range

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

Safety Precautions

These products are intended for use by professional applicators in accordance with the advice given in this document, the Technical Data Sheet, the Material Safety Data Sheet, the container(s) and/or other documents. The products should not be used without reference to all documents that CSL Silicones Inc. provides to its customers. Work involving the application of this product should be performed in compliance with all relevant Health, Safety & Environmental standards and regulations. When applying in confined spaces ensure use of adequate ventilation and/or respiratory equipment.



CSL Silicones Inc.
144 Woodlawn Rd. W.
Guelph, ON, Canada N1H 1B5
+1 519.836.9044
+1 800.265.2753
www.cslsilicones.com

Ultra-Hydrophobicity™



As a result of the superior characteristics of Si-COAT 570 & 570hs, the coating quickly achieves a state of Ultra-Hydrophobicity. The bio-mimicry of Si-COAT technology allows for very high contact angles between the coating and water droplets, as can be observed in nature in lotus leaves.

Unbeaten Performance — in-Lab & in-Field

Si-COAT HVIC has been aggressively tested by the **IEEE**; the **US Department of Energy**; **KEMA** (Netherlands); **Powertech** (Canada); **China Ministry of Electric Power**; **Central Power Research Institute** (India) and other leading authorities and laboratories around the world, including **Tier-1 global insulator manufacturers** and **multinational electric utilities**. With its flawless track record, Si-COAT is the most trusted technology in solving insulator contamination issues today.

Time and again, Si-COAT has set the benchmark in the field of RTV insulator coatings, establishing performance standards that cannot even be attained by non-ceramic/polymer (composite) insulators or the 'latest generation' and 'PLUS' versions of coatings put out by competitors.

Overhead transmission line insulators — porcelain long-rods, porcelain discs & glass discs **numbering well into the multiple millions** — have been coated in preference over the mechanically unreliable polymer (composite) insulators. A select list of utilities & companies that have chosen Si-COAT HVIC over polymer (composite) insulators include **BC Hydro**, **TransAlta & HydroOne** (Canada); **Abengoa & ISA/REP** (Peru); **Furnas & CEMIG** (Brazil); **EDF** (France); **Terna/Enel** (Italy); **PPC** (Greece); **TEIAS** (Turkey); **SEC & SWCC** (Saudi Arabia); **KAHRAMAA** (Qatar); **Kuwait MEW**; **ESSAR** (India)

Si-COAT HVIC is employed equally successfully in substations and in voltages up to 500kV HVAC & ±600kV HVDC. In fact, the useability of Si-COAT HVIC is independent of system voltage. Si-COAT HVIC has been installed in **tens of thousands of substations since 1987**. Installations in service for over 25 years continue their outstanding performance, saving the end-user maintenance expenses and reliability concerns.

An investment in Si-COAT HVIC as a critical system component, when worked out in case-by-case detail, invariably presents an exceptionally attractive return on investment (ROI) and payback period.

PREVENT AND ELIMINATE THE EXPENSE OF INSULATOR FLASHOVERS WITH Si-COAT HVIC

India Office:
104, Second Cross Street, Sri Sai Nagar, Thoraipakkam,
Chennai - 600 097. Mob.: +91 93408 88724,
Email: natarajan@cslsilicones.com

Si-COAT® 570™ & 570hs™ | RTV Silicone High Voltage Insulator Coating

The World's Leading HVIC

Si-COAT 570 & 570hs RTV Silicone HVIC (High Voltage Insulator Coatings) are developed and manufactured by CSL Silicones Inc. — a true global primary silicone manufacturer. Unlike competitors that lack the capacity for polymer architecture, CSL has developed products with a very long service life that result from proprietary and patented formulations. The coatings are engineered and tailored using precisely specified ingredients and a proprietary polymer crafted specifically for high voltage service.

Product Description

Si-COAT 570 & 570hs are single component, moisture cure, room temperature vulcanizing (RTV) silicone coatings that prevent leakage current on high voltage insulators that results from contamination and wetting. The key benefits of this patented technology are three-fold:

1. The elimination (or dramatic reduction) of insulator maintenance;
2. The improvement of grid reliability due to the elimination of contamination-related insulator flashover; and
3. The increased attractiveness of operating economics as a result of the elimination (or dramatic reduction) of direct losses due to leakage current and corona due to leakage current.

Superior Technology

The proprietary formulations of Si-COAT 570 & 570hs are based on the optimally-sized 13 micron ATH (alumina trihydrate) particle that is essential to the products' long service of well over 25 years.

The scientists at CSL discovered this particle size balances the need for maximized service life with the short-term need for rapid diffusion of LMWS (low molecular weight silicones) to the surface of the coating.

Coatings that do not contain ATH but that rely on silica (quartz flour) fillers have the critical pathways within the body of the coating clogged, thus making transfer of hydrophobicity to the pollution layer very slow. As well, a lack of ATH in the coating is proven to cause burning and erosion of the coating during inevitable periods of reduced hydrophobicity in the presence of corona discharge. The rich concentration and the even distribution of LMWS within the layer of Si-COAT 570 & 570hs is achieved through the proprietary polymer manufactured by CSL Silicones Inc.

Si-COAT HVIC exceeds the guidelines under **IEEE Std 1523-2002**. In fact, this document declares that the actual formulation of the coating plays an important role in the performance of the coating, which is a fact well-proven by the proprietary formulation of Si-COAT HVIC.

Features & Benefits

- **Save on Maintenance** – Eliminate or dramatically reduce maintenance of contaminated insulators.
- **Improve Reliability** – Prevent unplanned outages due to flashover.
- **Better Operating Economics** – Reduce direct losses from leakage current and corona due to leakage current.
- **Cost Effective** – Apply less product (15-20 mils [380-500 microns] DFT) for superior protection.
- **Versatile** – Suitable for glass, porcelain and polymer (composite) insulators at any voltage and under any service condition, including HVDC.
- **Extend Asset Life** – Increase the service life of polymer (composite) insulators.
- **Long-Lasting** – Unaffected by UV and chemicals to offer the longest service life.
- **Easy Application** – One-part formulation that is tack free in 30 minutes with a cure time of 3-6 hours.
- **Environmentally Responsible** – VOC compliant with a very long lifespan.
- 10 Year Extended Limited Warranty.



www.cslsilicones.com