XIAMETER® ECE-3650 Sylgard HVIC

One-part silicone coating designed for high-voltage insulators, instrument transformers and other high-voltage devices where surface contamination can cause insulation issues

FEATURES

- Imparts arc resistance and hydrophobicity
- Exhibits a unique ability to recover water repellency after contaminants are deposited on its surface
- Minimizes surface damage from electrical activity during extreme weather events

BENEFITS

- Flashover protection
- Long term hydrophobicity

COMPOSITION

- Silicone RTV dispersion coating
- Pourable liquid

APPLICATIONS

- On glass, porcelain and composite insulators where improved surface dielectric properties are needed.
- On line and station insulators, as well as bushing, instrument transformers and related devices.
- Other applications requiring arc resistance such as barrier boards used in switch gear and in large motors.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER® sales representative prior to writing specifications on this product.

CTM[1]	ASTM[2]	Test	Unit	Value
		As supplied		
0176		Appearance		White or grey
0208		Percent solids	%	79
0097	D1298	Specific gravity, wet	g/cm3	1.25
0095		Tack-free time	minutes	32
		As cured-electrical properties		
0112	D150	Dielectric constant at 60Hz		4.3
0112	D150	Dissipation factor		0.025
0114	D149	Dielectric strength at 14 mils	Volts/mil	1194
0114	D149	Dielectric strength at 27 mils	Volts/mil	797
0114	D149	Dielectric strength at 55 mils	Volts/mil	598
0112		Volume resistivity	Ohm.cm	$2.6x10^{14}$

[1]CTM: Corporate Test Method, copies of CTM's are available upon request.
[2]ASTM: American Society for Testing and Materials.

DESCRIPTION

XIAMETER® ECE-3650 Sylgard HVIC is a one-part silicone RTV dispersion designed to improve the performance of ceramic and non-silicone high voltage insulators and similar apparatus. When properly applied and cured, a smooth elastomeric coating is formed over the surface of the insulator. The silicone surface is highly hydrophobic when new and exhibits a unique ability to recover water repellency after contaminants are deposited on its surface. Interaction between the silicone coating and the contaminations occurs, which results in the maintenance of high services resistance and reduced leakage currents, interrupting the process that leads to contamination flashovers.

XIAMETER ECE-3650 Sylgard HVIC also minimizes surface damage from electrical activity during extreme weather events

such as salt storms. The coating can be used to impart arc resistance and hydrophobicity to other devices, such as barrier boards used in switch gear and in large motors.

This product is designed to reduce maintenance on insulators and associated equipment by reducing or, in many cases, eliminating the need for repetitive water washing, or eliminating the need for repetitive greasing.

HOW TO USE

Before use, XIAMETER ECE- 3650 Sylgard HVIC should be thoroughly agitated on a paint shaker or can roller to ensure uniformity.

XIAMETER ECE-3650 Sylgard HVIC should be applied in several coats over a clean, dry surface. Any surface previously coated with a silicone grease should be cleaned thoroughly before applying the coating. Surfaces other than glass or porcelain may require use of a primer to ensure adhesion. *Dow Corning*® 1200 OS Primer was recommended for improving the adhesion property. The real adhesion performance must be evaluated before application.

XIAMETER ECE-3650 Sylgard HVIC can be reapplied to previously coated surfaces after pressure water washing. The product is normally spray applied, but can be applied by brushing or dipping. For dry coating thickness ranges, you may wish to consult the Institute of Electronics Engineers, Inc., (IEEE) or work with your authorized XIAMETER distributor for detailed application assistance. The full cure takes approximately 1-3 hours at 22°C, 50% RH. Several sprayed coats may be needed to attain the appropriate thickness. Additional coats can be applied after 20 to 30 minutes. For dilution, a high flash point >38°C (>100°F) naphtha spirits solvent is recommended.

PRODUCT SAFETY INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE XIAMETER® WEBSITE AT WWW.XIAMETER.COM.

STORAGE

Product should be stored at or below 32°C (90°F) in original, unopened containers. The most up-to-date shelf life information can be found on the XIAMETER® Web site in the Product Detail page under Sales Specification.

When using XIAMETER ECE-3650 Sylgard HVIC from a previously opened container, any cured skin must be removed from the surface.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not intended for human injection. Not intended for food use.

Caution: XIAMETER ECE-3650 Sylgard HVIC is supplied in a combustible solvent. When using combustible solvents, keep away from heat, sparks and open flames. Use only with adequate ventilation. Avoid prolonged breathing of vapor and prolonged or repeated skin contact. Always follow solvent container label instructions.

SHIPPING LIMITATION

DOT Classification: Combustible.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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