Product Datasheet

XIAMETER® CTG-1890 4:1 with Dowsil™ OS-30 fluid
and
XIAMETER® CTG-1890 9:1 with Dowsil™ OS-30 fluid

One Component Protective Gray Coatings

Product Description
These products are specialty blends of the Xiameter® CTG-1890 protective coating made by Dow. They have been thinned at the indicated ratios by weight with Dowsil™ OS-30 fluid to reduce their viscosity from the roughly 40,000 cps (400 poise) viscosity of the unmodified coating. Thinning also extends their work-life without otherwise changing the properties of the cured coatings. Other dilution levels are available by request.

When fully cured these coatings provide protection to electrical wires and equipment including:
- Motor stator windings – Protects insulated motor windings from: dust, moisture and chemicals.
- Bus bars
- Splices and connectors – Provides protection against ultraviolet radiation, water and moisture; contaminants and corrosive fumes
- Transformers – Insulates the tops of distribution transformers and prevents short circuits caused by animals bridging between exposed terminals and the grounded tanks; also prevents short circuiting caused by birds or animals on other equipment
- Wooden pole tops and insulator pins – seals end-grains to prevents pole-top damage from weathering and moisture; applied to wooden insulator pins and crossarms; prevents damage due to current tracking and subsequent burning

Key Features & Benefit
- Provides excellent moisture resistance and protection from sand and dust particles
- Ease of handling (can be applied in the field or shop by brushing, dipping, or spraying)
- Good electrical insulating properties
- Adhesion to painted or unpainted metal, glass and wood surfaces
- Room temperature cure
- Flexibility from -75 to 350°F (-59 to 177°C) for continuous use and up to 400°F (204°C) for intermittent use
- Resistance to ultraviolet radiation and weathering
- Tack-free in 60-90 minutes; forms rubbery overcoat in a few hours
- Complies with FDA 21 CFR 177.2600 regulations for use as a coating for indirect food contact
- Electrical equipment completely coated with XIAMETER® CTG-1890 Protective Coatings can be readily cleaned with water spray

Typical Properties

UNCURED PROPERTIES	
Appearance	Gray*
Viscosity	CTG-1890 4:1 pbw 9,000 cps CTG-1890 9:1 pbw 17,000 cps
Specific Gravity	0.89 -0.90
Flash Point	>50°F (>10°C)
Skin Over Time at 25°C**	~30 minutes
Tack Over Time at 25°C**	60 minutes minimum
Full Cure: 7 days at room temperature and with an ambient humidity of 30% - 80%. Sections thicker than 1/2" may take longer to cure.	
Alternate Cure: It would be possible accelerate curing in an oven with moisture vapor lines or a dish of water to provide humidity. Contact us for assistance if you would like to explore this alternative as we have not yet developed guidelines for heat curing.	

*Black pigmented available by request

**Curing tested at 25C and 50% relative humidity in a 1/8" thickness. Ambient temperature, humidity levels, and product thickness will affect the cure rate.

CURED PROPERTIES:	
Shore A Hardness	21A
Dielectric Strength	430 Volts/mil
Dielectric Constant at 100 Hz	2.5 kHz
Dielectric Constant at 100 kHz	2.5 kHz
Dissipation Factor at 100 Hz	0.00007
Dissipation Factor at 100 kHz	0.000181
Volume Resistivity	2 x 10^{15} ohm-cm
Temperature Range of Use, continuous or cyclical	-62°F to +350°F (-52°C to 177°C)

Note: Not for Product Specification Purposes – these are typical values and based on 7 days curing with approximately 50% relative humidity. Please contact SP&S for assistance in writing purchasing specifications.

Curing Characteristics

Under normal room temperature conditions (23°C - 27°C) and humidity (30% - 80% relative humidity) and in a thickness of 1/8" or less, the Xiameter® CTG-1890 coatings will develop a skin in about 30 minutes, will become tack-free in about 60 – 120 minutes and will develop handling strength in 4-8 hours. Full strength will develop over 7 days at the same room temperature conditions. Because this adhesive cures with exposure to moisture and under ambient temperature conditions, a change in curing speed may be seen if the temperature or humidity changes.

Application:

Xiameter® CTG-1890 coatings may be applied by brush, by dipping components, wires, or assemblies into the coating, or pouring or spraying onto the application area. For some spray equipment additional thinning may be necessary. Dowsil™ OS-30 can be used for further thinning or other most rapidly evaporating thinners. Contact SP&S for assistance if you would like recommendation on alternate thinners.

For most surfaces, including most metal, plastics, glass, and rubbers, the Xiameter® CTG-1890 coatings will provide an excellent bond with the need for priming. However, if the bond is not enough on a specific surface, our Primax™ primers are compatible with the CTG-1890 coatings and can provide the improved adhesive that is needed. .

Shelf-life and Storage

Xiameter® CTG-1890 coatings should be stored in their original, sealed containers in an environment that does not exceed 38°C (100°F). Under these conditions the expected shelf-life of the material is a minimum of 12 months from Date of Shipment.

FIRST AID

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

IMPORTANT: The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

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