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CSL-880 Technical Data Sheet

High Voltage Insulator Compound

1. PRODUCT NAME
CSL-880 High Voltage Insulator Compound

2. FEATURES
- Non-curing compound
- Not affected by UV light, temperature, normal chemical environments and ozone
- Supplied ready-to-use with no mixing of chemicals
- Proven to be effective in all types of conditions from salt fog to cement dust

3. PRODUCT DESCRIPTION
CSL-880 silicone compound has been developed for the maintenance of high voltage insulators. Its grease-like formulation gives porcelain insulators long-term resistance to water filming, thereby suppressing leakage current, which is the source of radio and television interference and flashover. When the compound becomes laden with airborne contaminants, its anti-tracking filler system protects against tracking. Its unique formulation resists the sun's ultraviolet rays and ozone produced from electrical discharges. It is easy to apply and has excellent adhesion. Its white color makes it easy to insure that a uniform and complete coating is applied and also when removal becomes necessary, due to excessive contamination.

4. INSTALLATION
The surface of insulators to be coated must be thoroughly cleaned and dry. In most instances, the insulators need only to be high pressure water washed.

Insulators contaminated with a cementitious material must be cleaned with a high pressure air blast that delivers a dry abrasive cleaner, such as crushed corn cob or walnut shells mixed with limestone. Previously greased insulators must be cleaned of contaminated grease. If it is possible to de-energize the facilities, the insulators may be cleaned by hand. Simply wipe off the contaminated grease with cloths. If the grease coating has hardened and caked on the insulator, removal as with cementitious material is suggested.

The effectiveness of the silicone compound is dependent upon the proper thickness and the uniformity. The requirements for protection differ widely according to location and environment, and govern the proper thickness. Non-absorbent contaminants,

Typical Properties
These values are not intended for use in preparing specifications

As Supplied	
Type	Non-curing compound
Appearance	Smooth, white, thixotropic paste
Specific Gravity	1.39
Useable Temperature Range	-60°C to 200°C (-70°F to 390°F)
Oil Separation, 200°C (ASTM D1742)	0.13%
Evaporation, 200°C (ASTM D972)	4.7%
Unworked Penetration, 25°C (ASTM D217)	262
Worked Penetration, 25°C, 200 strokes (ASTM D217)	323
Dry Arc Resistance (ASTM D495)	233 s.
Dielectric Strength (ASTM D149)	325 V/mil (128 kV/cm)
Volume Resistivity (ASTM D257)	1.0 x 10^{13} ohm.cm
Dissipation Factor, at 100 Hz and *1000 Hz* (ASTM D150)	0.01, *0.005*
Dielectric Constant, at 100 Hz and *1000 Hz* (ASTM D150)	4.0, *4.0*

such as carbon or metallic particles, require less compound than absorbent particles such as fertilizer or road salt. Optimum application practices for insulator maintenance is normally achieved through extensive field use.

To adequately maintain protection from contamination over a long period of time, a coating of 1 - 2 mm is recommended. The compound can be applied to insulators by hand brush or spray. Hand coatings can be applied by hand, with a soft cotton glove or cloth. Brush coatings should be applied with a brush having hard bristles.

5. PACKAGING

CSL-880 is supplied in 3.8 liter (1 US gallon) cans, 19 liter (5 US gallon) pails.

6. STORAGE

CSL-880 when stored in original unopened container at or below 32°C (90°F) has an 18 month shelf life from the date of manufacture. Most products however, will last longer if stored in cool dry conditions.

7. SAFETY PRECAUTIONS

For specific information regarding the safe handling of this compound, please refer to the Material Safety Data Sheet available on this product.

8. WARRANTY

CSL Silicones Inc. warrants that its products will meet its specifications. CSL shall in no event be liable for incidental or consequential damages. Except as expressly stipulated, CSL's liability, expressed or implied, is limited to the stated selling price of any defective goods.

Data is subject to change without notice and it is therefore recommended that this information not be used for specification writing. For additional information on specific applications, contact the manufacturer.

Typical Quantities of Silicone Compound Required to Coat Specific Insulators to an Average Thickness of 1.5 mm

Insulator Type	*Compound Required (kg)*
Standard Suspension	0.25
34.5 kV Line Post	0.35
34.5 kV Pin-Cap Apparatus	0.60
69 kV Bushing	1.30
230 kV Bushing	7.20

Note: Based on a coverage of 1.5 kg/m^2

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