

ELPLUS 880

High Voltage Anti-Flashover Insulating Grease

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1. Product Overview

ELPLUS 880 is a premium, high-dielectric strength anti-contamination insulating grease specifically engineered for electrical insulation and protection in demanding outdoor environments. It provides a robust barrier against moisture, dust, salt fog, and industrial pollutants. The grease is formulated to maintain its consistency across a wide temperature range, ensuring long-term insulation reliability and preventing flashover accidents on insulators and high-voltage connections in substations and transmission lines.

2. Core Features

- **Superior Dielectric Insulation:** Offers exceptional electrical breakdown strength, providing a safe, non-conductive barrier for high-voltage applications.
- **Excellent Anti-Contamination:** The special encapsulated formula prevents the accumulation of conductive pollutants, effectively reducing leakage current.
- **Moisture and Oxidation Barrier:** Creates a persistent hydrophobic seal that prevents moisture ingress, oxidation, and corrosion of metal or ceramic components.
- **Broad Thermal Stability:** Maintains stable consistency from -50°C to +200°C; it will not melt, run, or harden under extreme environmental conditions.
- **Extended Maintenance Intervals:** Reduces the need for frequent cleaning and maintenance of insulators, ensuring continuous grid stability.

3. Applications

- Surface coating for ceramic or glass insulators in high-voltage substations.
- Insulation protection for disconnectors, bushings, and busbar joints.
- Moisture sealing for electrical equipment in high-humidity, coastal, or industrial areas.
- Lubrication and protection for switchgear components requiring high dielectric insulation.

4. Typical Technical Properties

Properties	Test Method	Typical Data
Appearance	Visual	Translucent/White viscous grease
Penetration (0.1mm)	ASTM D217	250 - 300
Dielectric Strength	ASTM D149	≥ 20 kV/mm
Volume Resistivity	ASTM D257	$\geq 1.0 \times 10^{14} \Omega \cdot \text{cm}$
Oil Separation (24h/200°C)	FTMS 791B	< 0.5 %
Operating Temp.	-	-50°C ~ +200°C
Water Solubility	-	Insoluble

5. Application Instructions

- Surface Preparation:** Clean the substrate surface thoroughly to remove any existing grease, dust, or contaminants. Ensure the surface is dry before application.
- Application:** Apply a uniform layer of grease to the insulator surface using a brush, spatula, or automated dispensing equipment.
- Layer Thickness:** A coating thickness of 1.0 mm to 3.0 mm is recommended depending on the pollution severity level.
- Maintenance:** Periodically inspect the coating integrity. In extreme pollution conditions, remove the contaminated layer and re-apply fresh grease to maintain optimal performance.

6. Packaging & Storage

- **Packaging:** Standard packaging includes 1 KG, 5 KG, and 20 KG containers.
- **Storage Conditions:** Store in a cool, dry place. Keep containers tightly closed when not in use.
- **Shelf Life:** Under unopened and standard storage conditions, the shelf life is **24 months** from the date of manufacture.

7. Health & Safety

- This product is generally safe. Avoid direct eye contact.
- Wash hands thoroughly after handling.
- Dispose of waste in accordance with local environmental regulations.

Technical Support & Contact

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