

#### **PowerSet Datasheet**

PowerSet provides the electrical power industry with a simple, permanent method to substantially lower the earth resistance of copper-clad ground rods and copper grounding systems. When used in conjunction with standard copper grounding equipment, PowerSet will lower the contact resistance to earth by approximately 40%.

PowerSet is an easily applied product which produces lower steady state and stable grounding impedance. PowerSet produces lower surge impedance which results in faster transient dissipation. Manufactured from environmentally safe and stable products, PowerSet has an excellent shelf life, and long-term storage has no performance effects.

PowerSet creates the best positive, low resistance, electrical connection between the grounding system and the earth. When a ground enhancement material is specified which requires a hardened state, PowerSet is the product of choice. PowerSet has been manufactured to be compatible with standard copper grounding systems and standard field application methods. It can be used in conjunction with grounding grids to minimize step and touch potentials. In high resistivity soils, PowerSet can be used to produce acceptable grounding impedance with reasonable size.

The versatility and ease of applying PowerSet to lower ground resistance of grounding equipment allows for a variety of earthing designs to be used which would otherwise be uneconomical or not practical.\*\*\*

PowerSet requires only minimum instruction for proper application. No special tools are needed.

- \*PowerSet should be used as a ground enhancement material when a setting fill is specified.
- \*\* PowerSet contains no by-products. PowerSet does not contain graphite shavings or powdered graphite.
- \*\*\* Loresco® is the largest manufacturer of carbon-based backfills in the world.

## **Vertical Installation:**

Drill or dig the earth hole to the desired diameter and depth. Suspend groundrod in center of hole to be filled. Pour PowerSet until desired level is obtained. Remove excess water prior to pumping. If necessary, PowerSet may be pre-mixed and pumped under water.

### **Horizontal or Grid Construction:**

Entire grounding system should be surrounded by PowerSet. Conductors should be insulated as they exit the PowerSet column. PowerSet should be used as a ground enhancement material when a setting fill is specified.

### **Horizontal Construction:**

Remove excess water prior to application.

Pour into horizontal trench until level of ground wire is reached.

Place ground wire. Pour in additional PowerSet until ground wire is covered to desired height.

Cover with fill. No tamping is necessary.

## **Grid Construction:**

Pour PowerSet and spread over ground until desired thickness is achieved.

Cover with fill.

Use ground staples to maintain ground wire in center of fill.

The use of PowerSet around the grounding system will reduce surge impedance by increasing the effective contact area of the electrode to the soil.

# Shipping:

Loresco PowerSet is shipped in fifty (50) pound (22.7 kg) coated, woven polypropylene bags. Pallets are available with fifty bags per pallet. Proven export packaging is available.