

## EARTH ELECTRODES, GROUND ENHANCING PRODUCTS AND EARTH PITS

### GROUND ENHANCING PRODUCTS

**CONDUCTIVER PLUS is a non corrosive ground enhancing gel with low solubility but is very hygroscopic.** It is made of an electrolyte base, which contributes to the conductivity of the mixture.

The conductivity of the ground is almost exclusively of an electrolytic nature due to the salts dispersed in the water which impregnate it and which concentrate on the surface due to an adhesive phenomenon of the sand grains and clay in the ground.

Therefore, it is possible to increase the conductivity of the ground, improving its absorption power, retention of water and increasing its richness in soluble salts. It would be very easy to achieve this effect using a simple method, impregnating it with any electrolyte, such as common salt (NaCl) or sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>), but the high solubility of these salts, as well as their low absorption in the ground mean that they are very quickly swept away by the infiltration waters, making their action very short term. Another inconvenience of common salt is its corrosive effects on the earthing electrodes.

The components of the CONDUCTIVER PLUS® gel have been selected according to their solubility, in order to obtain from the soluble components, a low soluble product, which will provide us with a long lasting conductor product deposit. The main advantage of this product is that **a conductor gel is formed below the soil near the electrode.**

In summary, the CONDUCTIVER PLUS® gel is characterised by:

- Having the capacity to create partially ionized electrolytes, with a high charge and a high capacity to retain water and to form gels.
- Remaining in the ground for a long time, thanks to the formation of links with the particles.
- Increasing conductivity (approximately 200%) of the ground during one year and rainfall of 700 litres/m<sup>2</sup>.
- Not causing corrosion of the earth electrodes.
- Being totally ecological.

#### METHOD OF APPLICATION

1. The ground can be dry, no previous preparation is necessary.
2. Prepare a mixture of the YELLOW product in 5 litres of water using the measuring recipient.
3. Empty the first solution to the ground and add another 5 litres of water.
4. Leave the product to disappear into the ground.
5. Clean the recipient before continuing with the next product.
6. Prepare a second solution with the WHITE product and 5 litres of water. Empty this mixture evenly on the ground. Add another 5 litres of water. Leave to filter until complete absorption.
7. Once the second product has filtered, you can then take the earth resistance measurement.

Reference	Denomination	Description	Weight (kg)
AT-010L	CONDUCTIVER PLUS®	Non-corrosive and ecological gel that improves soil conductivity	4,5
AT-020L	Graphite powder	Backfill specific for earth termination systems	25
AT-030L	Thin clay-like powder	Backfill specific for earth termination systems	25
AT-031L	APLIFILL®	Compound that reduces soil resistivity by retaining moisture	1
AT-032L	APLIFILL®	Compound that reduces soil resistivity by retaining moisture	25

Meets EN 50164, UNE 21186, NFC 17102

