

WORLDCHEM MZ 222

SOLAR PANEL CLEANING PRODUCT



Product Highlights

- ✓ Will not damage the surface of the solar panel
- ✓ **Tested by TÜVRheinland – does not damage the ARC, silicone and aluminium frame**
- ✓ Easily remove cement dust, stone dust, rust, lime, pollen, organic dusts, etc. from solar panels
- ✓ Easy to apply and saves time and money on maintenance
- ✓ Readily biodegradable and environmentally friendly
- ✓ Packaging: 2 L, 5 L, 10 L, 20 L, 30 L drums and IBC.

Cleaning solar panels is critically important because even small amounts of dirt can cause significant energy losses and long-term damage. When dust, sand, bird droppings, pollen, salt, or pollution settle on the surface, they block light transmission.

Typical power loss due to soiling:

- Light dust: 3–7%
- Heavy dust / sand: 15–30%
- Bird droppings or salt crusts: up to 40% locally
- Desert / coastal areas (no cleaning): 30–50% annually

Removing iron dust, lime, paint dust, cement residue, propolis powder and pollen from solar panels requires the right chemistry + correct mechanical method. Using the wrong approach can permanently reduce panel efficiency by causing micro-scratches, glass etching, or anti-reflective (AR) coating damage. For example; iron dust causes hot spots if not removed. Lime/Hard water scale forms mineral film and reduces light transmission by 5-15%. Pollen is an organic dust which is sticky can support algae growth.

MZ 222 solution is the best product with an anti-static effect that can handle all these contaminants. The antistatic properties of MZ 222 make future cleanings easier, keeps the panel cleaner between cleanings, reduces cleaning time and water consumption by up to 50%.

Directions for using the product:

Recommended usage ratio is 1:3 – 1:5. (v/v). Conduct a test on a small area to determine the optimal dilution for your specific situation. It is recommended to extend the product's contact time on the panel rather than reducing/increasing the dilution. Before applying the solution, make sure the modules are dry. Spray the solution on the affected areas. Wait a few minutes for the product to react with the surface

Utilizing a brush, thoroughly rinse the panel with clean water, ensuring complete removal of any remaining product and cement particles. If necessary, repeat the process until the desired outcome is attained.