

BLESSTAR® - Bio-based MPHA Antimicrobial Additive EE-PAI-009

【Product Introduction】

This product is exclusively developed by Ecolar Technology Limited, a tech innovation company jointly incubated by The Hong Kong Polytechnic University and Hong Kong Science & Technology Park. It is produced by bio-based, eco-friendly antibacterial and antiviral material — MPHA (Modified Polyhydroxyalkanoate). It is a broad-spectrum, high-efficiency antimicrobial agent for paints, effectively killing coronaviruses, superbugs and moulds, preventing hospital-acquired cross-infections, and reducing the risk of infectious diseases.

【Product Characteristics】

- **Fully Biodegradable:**

Tested by third-party laboratories, 99.5% degradation within 28 days, with degradation products consisting only of carbon dioxide and water. No heavy metal pollution. Low carbon emission.

- **Broad-Spectrum Antiviral/Antibacterial Properties:**

Kill rate: > 99.9% (Common bacteria and superbugs: Staphylococcus aureus, Escherichia coli, Candida albicans, Methicillin-resistant Staphylococcus aureus; Coronaviruses: COVID-19, H1N1, H3N2, etc.)

- **Safe, Non-Toxic, Non-Allergenic:**

No skin irritation or allergic reactions. Negligible toxicity. Biosafety level is 2 to 200 times higher than that of conventional products

- **Stable & Durable :**

Keep antimicrobial properties for more than three years.

【Technical Data】

- Active ingredient percentage: 100%;
- Appearance: White powder;
- Solubility: Water-soluble solution.

【Application Method】

- Take 7 g of EE-PAI-009 and mix uniformly with 70 g of water (40°C).
- Add 1000 g of paint to the above solution and stir thoroughly.
- Add 100 g curing agent and 80g water to the above solution, stir thoroughly, prior to use.

【Precautions】

- Store in a cool, dry place away from direct sunlight. Keep below 40°C.