

Bio-based and Green Wide-spectrum Antimicrobial MPHA Finishing Agent

生物基绿色广谱抗菌抗病毒MPHA整理剂

This product was exclusively developed by Ecolar Technology Limited — a tech startup incubated jointly by The Hong Kong Polytechnic University and Hong Kong Science Park. Manufactured using MPHA (a modified polyhydroxyalkanoate), a safe, eco-friendly, and bio-based antimicrobial material, it serves as a broad-spectrum, highly effective antimicrobial agent suitable for various fibers and fabrics. It effectively eliminates coronaviruses and superbugs, prevents hospital-acquired cross-infection, and reduces the risk of infectious diseases.

Ecolar® Bio-based MPHA Antimicrobial Finishing Agent EE-CHP009



[Technical Data]

- **Appearance:** White powder
- **Content of active antibacterial ingredient:** 100%
- **Particle size:** Micron/nano scale
- **Thermal stability:**
Withstands high temperatures up to 300°C

Ecolar® Bio-based MPHA Antimicrobial Finishing Agent EE-COF008



[Technical Data]

- **Solids content:** 40–43%
- **Appearance:** Transparent or translucent liquid
- **pH:** 4.5–5.5
- **Ionicity:** Anionic
- **Solubility:** Water-soluble

[Product Features]

• Fully biodegradable:

Third-party testing confirms 99.5% degradation within 28 days; degradation products are limited to carbon dioxide and water, with no heavy metal contamination. Low carbon emissions (1/6 to 1/2 of comparable products).

• Broad-spectrum antiviral and antibacterial properties:

Elimination rate >99.9% (common bacteria and superbugs: Staphylococcus aureus, Escherichia coli, Candida albicans, MRSA; coronaviruses: COVID-19, H1N1, H3N2, etc.)

• Safe, non-toxic, and hypoallergenic:

Third-party testing shows no skin irritation or allergic reactions; toxicity is negligible, and biological safety is 2 to 200 times higher than that of conventional products.

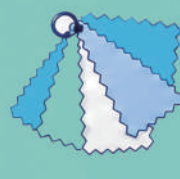
产品应用/Product Applications



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