

Product Features

JM Nanocomposite Material JM-TTA01



JM-TTA01 is a surface treatment with antibacterial and anti-viral functions. Dust particles do not adhere well because of ionic charges on coating surface.

Non-Toxic and Environmentally-Friendly Nano Coat treatment on surfaces.

JM-TTA01 has obtained FDA registration, Registration Number:3010700940.

Product Comparison

| | Technical Comparison | |
|-----------------------------|--|--|
| | 1. Nanocomposite material is a neutral aqueous solution, the average particle diameter is small, does not aggregate or precipitate. | |
| Nano Grade Materials | 2. Nano composite material not only oxidises organic matter it can also oxidise bacterial and viral cells. Laboratory test results showed that after UV irradiance of 1 hour our photocatalyst can achieve 99.9% antibacterial rate against E.coli, MRSA, S.aureus, P.aeruginosa and other types of bacteria exhibiting significant anti bacterial properties. | |
| | 3. Material has long term stability, safe and easy storage and is non-toxic to human and is environmentally friendly. | |
| | 4. Can be applied on the majority of organic/inorganic materials, ex. Metal, plastic, glass, textiles and paper materials. | |
| Non-Nano Grade Materials | 1. Titanium dioxide photocatalyst powder is added to acidic organic solvents, the average particle diameter is large. Particles easily aggregates and precipitates. | |
| | 2. Coating adhesion is poor and coat is not uniform, organic solvent decomposes causing flaking and peeling in coating. | |
| | 3. The titanium dioxide photocatalyst is easy to aggregate in the solvent and precipitates | |
| | 4. Only suitable on inorganic materials that are acidproof or heat-resistant | |



JM Nanocomposite Material JM-TTA01

Product Applications

Coated sample pieces plate count after 24hr contact time with test inoculum.

E.Coli Test Inoculum 10⁵ CFU/ml diluted to 10² CFU/ml Plate count.



JM-TTA01 Coated Sample



Non-nano grade material coating



 Broken textiles & Microbac antiviral test report





Refer to $\ensuremath{\mathrm{JIS}}\xspace Z\xspace 2801$ Antimicrobial efficacy standard

| 10 ⁵ CFU/ml->10 ² C Colony Forming U | Antibacterial Activity* | |
|---|----------------------------|-----|
| Test Inoculum | 254 | ₩ |
| JM-TTA01 Coated | 1 | R>3 |
| Non-nano Grade Coated | 231 | R<2 |

- * Antibacterial activity (R), R shall be >
- 2 for Antibacterial effectiveness.

Product Certification:

TN-050 Verification and Validation Standard on Nano Antibacterial Paint

