

Electromagnetic wave control

LeafPowder™ EWC04

Aug, 2020

LeafPowder™

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- Nano & micron size powder

(nanometer : thickness, micrometer : particle size)

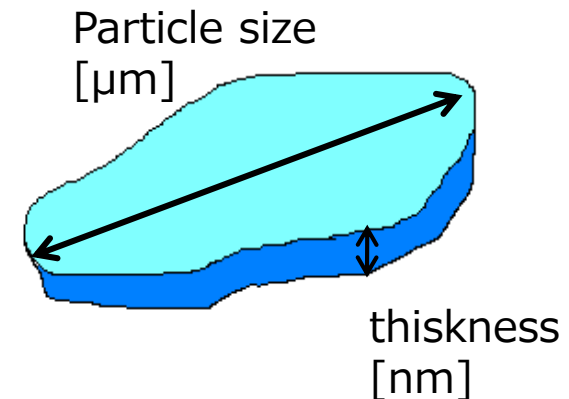
→ expect for bulk material function & quantum effect

- High aspect ratio & Scale-like shape

→ thinner & high adhesion

- Flexible selection of materials

→ possible to make various compounds
by stacking layer technology



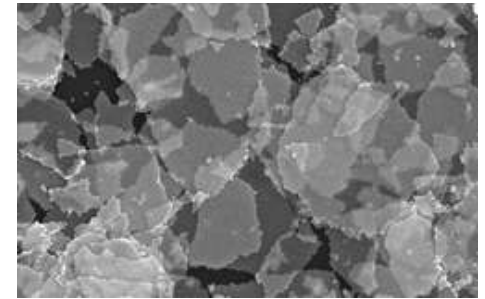
All other values are either nominal values or typical (typ.) values, and are not guaranteed

LeafPowder™ EWC04

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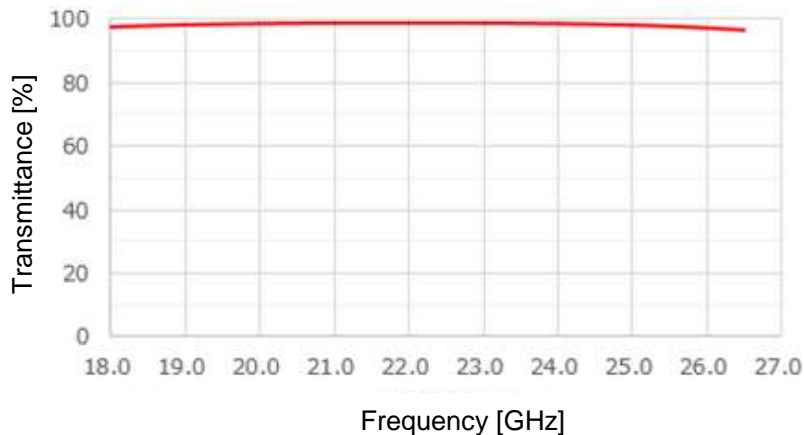
● LeafPowder™ EWC04 (prototype)

Grade	Solid contents	Particle size	Dispersant
EWC04	10 wt%	10µm	Butyl acetate CAS No.123-86-4

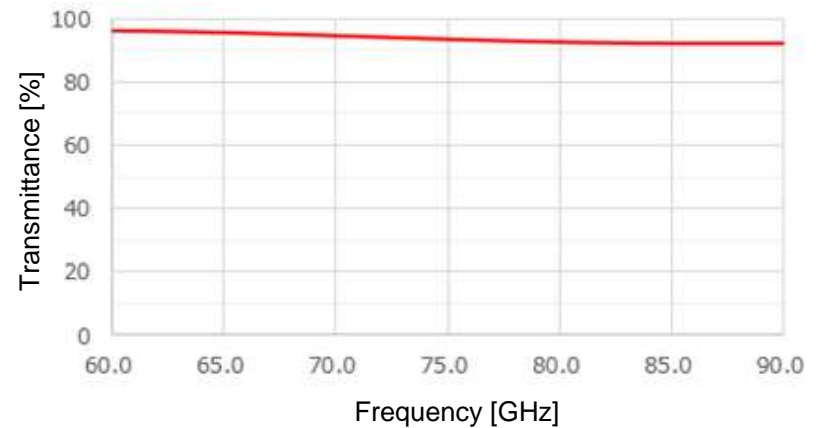


SEM image of LeafPowder™ EWC04

Narrow band wave transmittance



Millimeter transmittance



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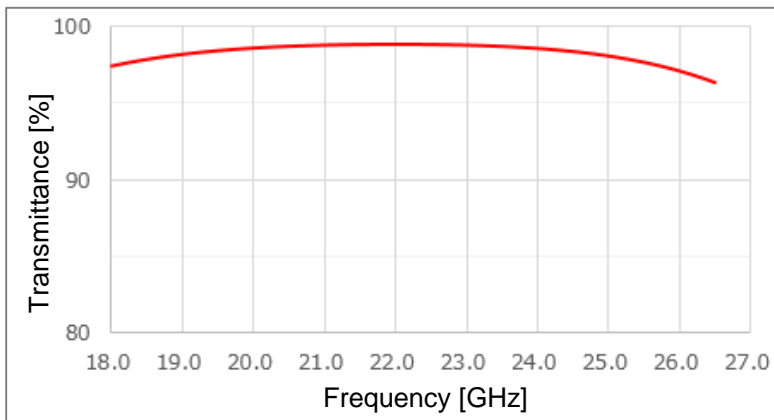
LeafPowder™ EWC04

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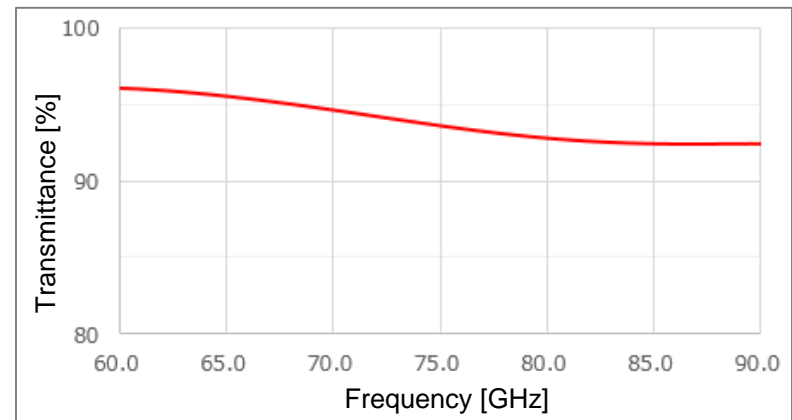
● LeafPowder™ EWC04 (prototype)

- More than 90% transmittance in both narrow band and millimeter wave

Narrow band wave transmittance



Millimeter wave transmittance



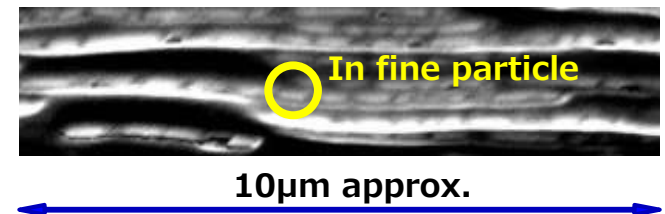
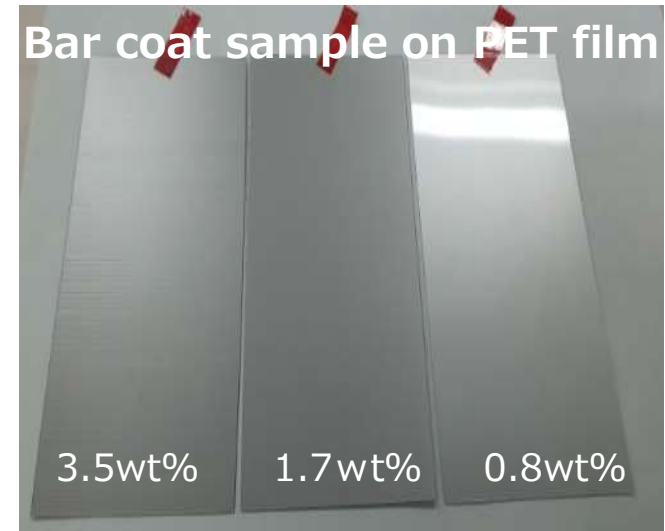
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LeafPowder™ EWC04

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- High stability against water, acid, alkali and heat

Durability test results	
Water resistant	No appearance change
Acid resistant	No appearance change (pH4~)
Alkali resistant	No appearance change
Heat resistant	No appearance change (200°C-30min)



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LeafPowder™ EWC04

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- Inkjet printed sample by solvent ink with pulverized EWC04 less than $1\mu\text{m}\Phi$



Oike & Co.,Ltd.

粉体材料SBU