

developed product

Fine Copper powder

Substitution of silver with copper through fine powder manufacturing technology suitable for mass production
Promotes next-generation electronics technology and sanitary environment

Advantage

- ☑ Submicron to nano copper powder development by wet process
- ☑ Excellent oxidation resistance for easy handling in air
- ☑ High antibacterial properties, excellent sinterability around 200℃, and conductivity (when sintered)

Particle size lineup

Low impurities contribute to stable quality

Developed Product Name	Average Particle Size (㎛)	O (%)	C (%)
UCP-040N	0.44	0.32	0.20
UCP-020N	0.21	0.44	0.26
UCP-020N2	0.21	0.70	0.53

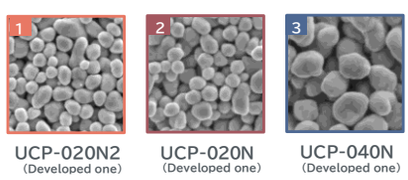
Sinterability test and Particle Shape

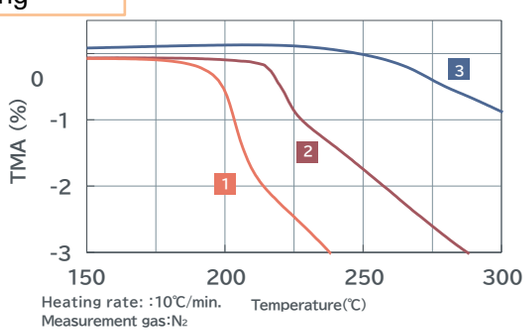
TMA(thermomecanical analysis) and SEM images

Enables sintering in a nitrogen environment

TMA:Measurement of thermal shrinkage of Cu powder compacts







Application

Power semiconductor, advanced semiconductor packaging material

Enable high heat dissipation through both pressurized or non-pressurized bonding



Printed electronics wiring materials Photovoltaic cell wiring materilals

Wiring materials for flexible and rigid substrates



High thermal and High electro conductivity material sintering additive

Contributes to the development of low-temperature processes utilizing sinterability

Antibacterial, antiviral, antifungal materials: High bio-properties

High performance expected with small addition, surpassing other metals and organic materials



If you have any question about this product, please feel free to contact us.
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