

Copper Micro-particles CMP108- CMP109

Description:

Copper atom has lost one electron so the ions vibrate and free electrons move between them. This results in best electrical and thermal properties of Cu. Copper is a naturally hygienic metal that slows down the growth of bacteria and acts as an anti-biotic, anti-microbial, and anti-fungal agent.

Characterization		
CAS	7440-50-8	7440-50-8
HS Code	7406209000	7406209000
Stock No.	CMP108	CMP109
Molecular formula	Cu	Cu
Purity (%) - ASTM E-53	99.5	99.7
Color	Light Rosy	Light Rosy
Morphology	Spherical	Dendritic
Isotopic composition	Natural Copper	
Size range D50 (µm)	45	45, 63
Total impurity (%)	<0.1%	<0.1%
Oxygen (%)	0.5	0.3
Flowability (sec/50 g)	27	36
Apparent Density (g/cm ³) ASTM B-212 /B-417)	2.5	1.1- 1.8

Note: product specifications are subject to amendment and may change over time.



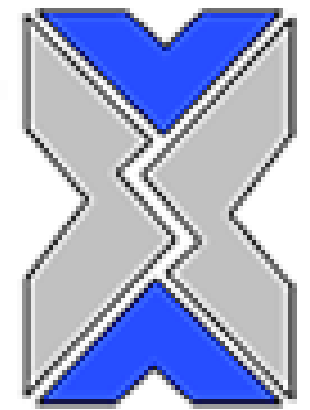
Image of copper micropowder (CMP109)

Applications (but not limited to the following):

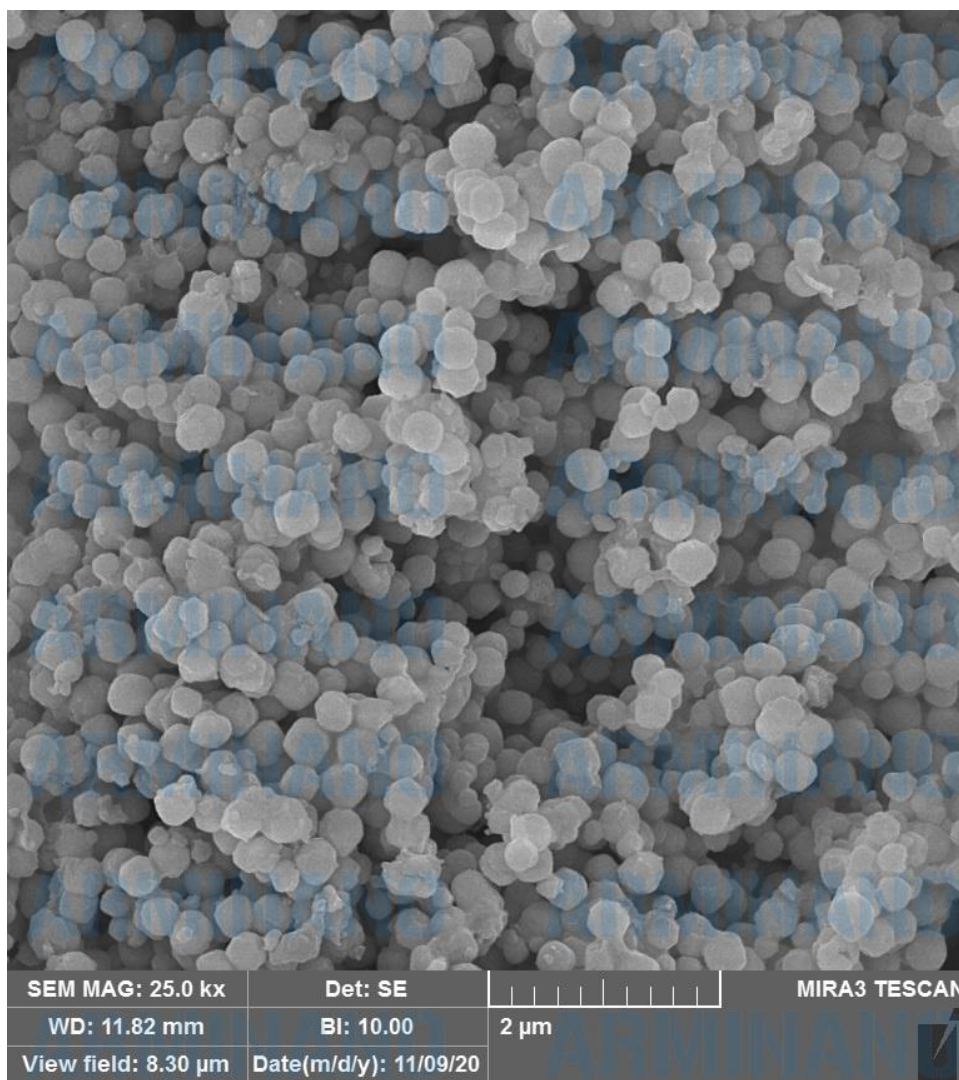
Catalysts, conductive inks and coatings, sintering additives, lubricant additives, heat transfer materials, Integrated circuits, batteries, solar cells, capacitors, radio frequency shielding

Safety:

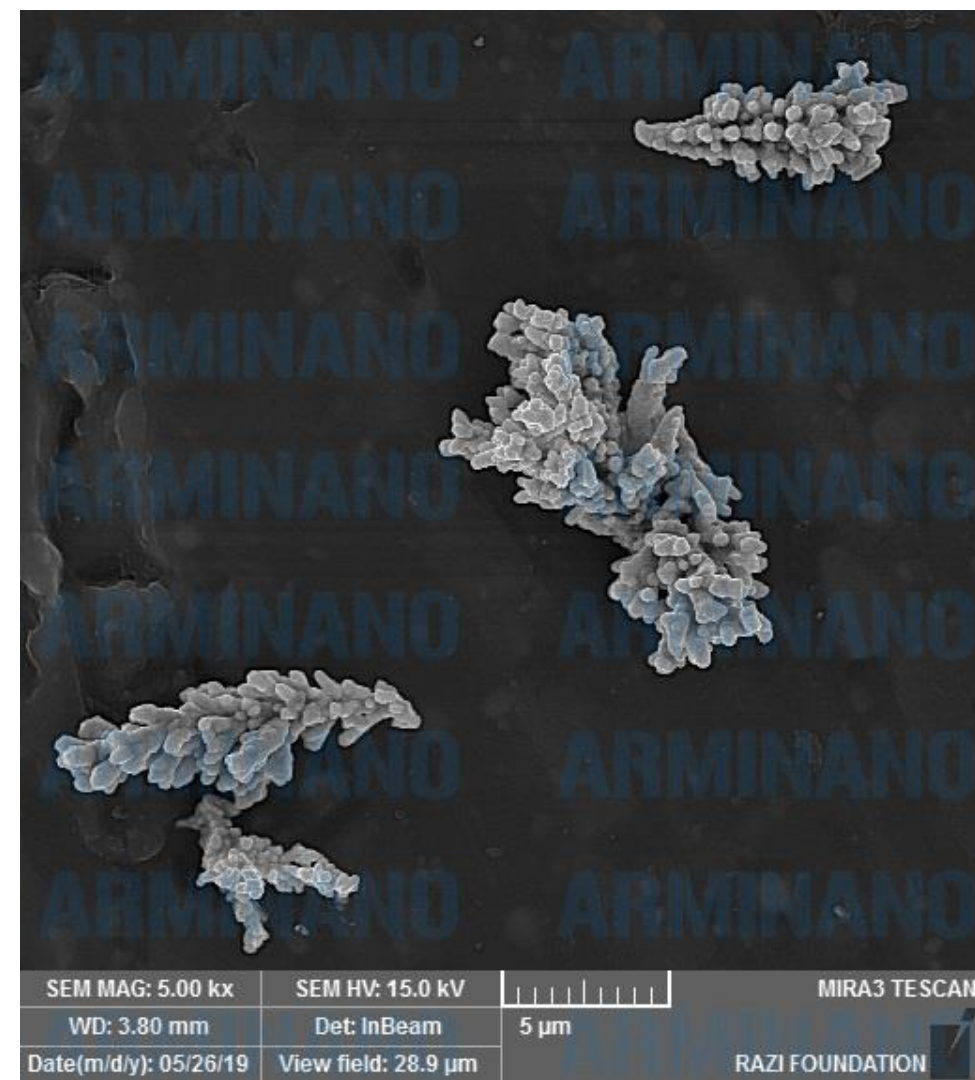
Avoid breathing dust.
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Do not expose to extreme heat or flame.
Refer to MSDS prior to handling this material.



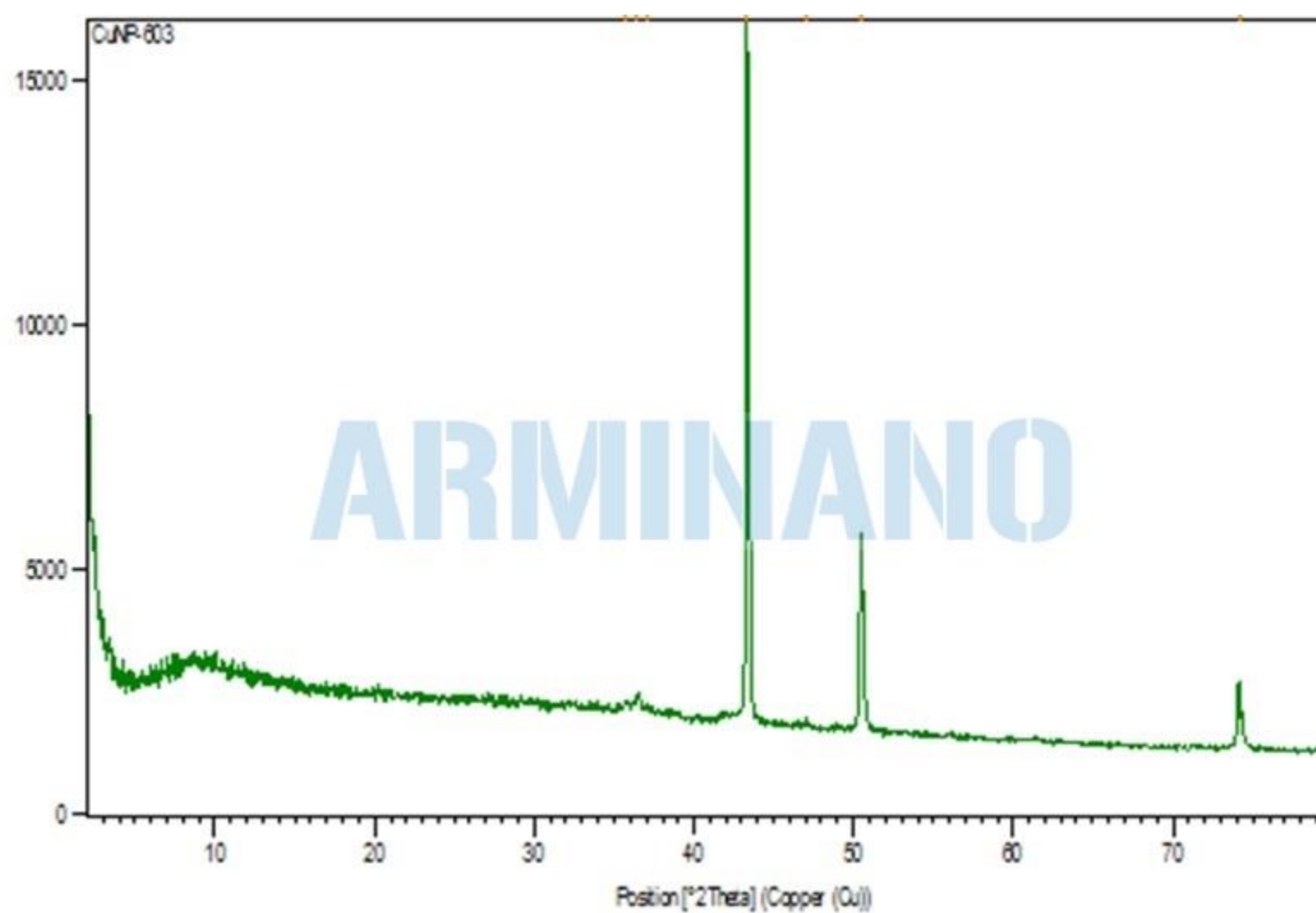
Copper Microparticles CMP108-109



SEM images of CMP108



SEM images of CMP109



XRD pattern of CMP108-109

Storage:

- Keep it in cool dry place.
- Avoid direct sunlight.
- Do not freeze.
- To avoid oxidation, do not expose to air for so long.
- To disperse nanoparticles sonication could be used.

Shelf life:

When stored as specified the product is stable for at least 6 months.

