

Copper Nanoparticles CNP11

Description:

Suspension of copper nanoparticles are produced with concentrations of 1000 and 2000 ppm and functionalized by PVP-K30.

Characterization	
CAS	7440-50-8
Stock No.	CNP111 CNP112
Molecular formula	Cu
Molecular weight (g/mol)	63.55
Form	Water Suspension
Color	Brown
Concentration (mg/mL)	1 2
Functional group	PVP
Morphology	Spherical
Crystal structure	FCC
Size range (nm)	20-40
Total impurity (%)	< 3
Oxide density (g/cm ³)	N/A



Image of suspension of copper nanoparticles (CNP11)

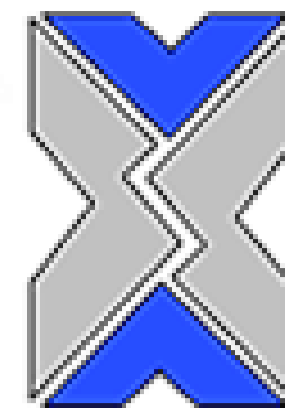
Note: product specifications are subject to amendment and may change over time.

Applications (but not limited to the following):

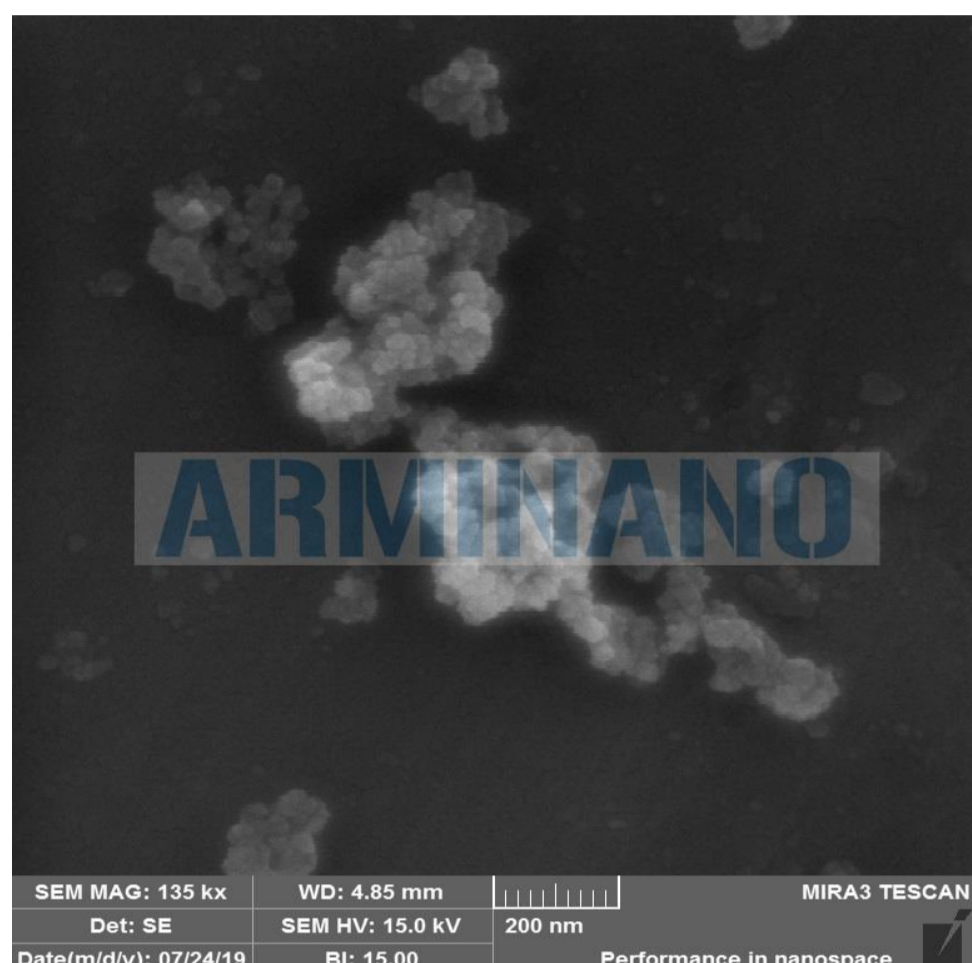
Catalysts, conductive inks and coatings, sintering additives, medicine and anti-bacteria, lubricant additives, heat transfer materials, Integrated circuits, batteries, solar cells, capacitors, radio frequency shielding

Safety:

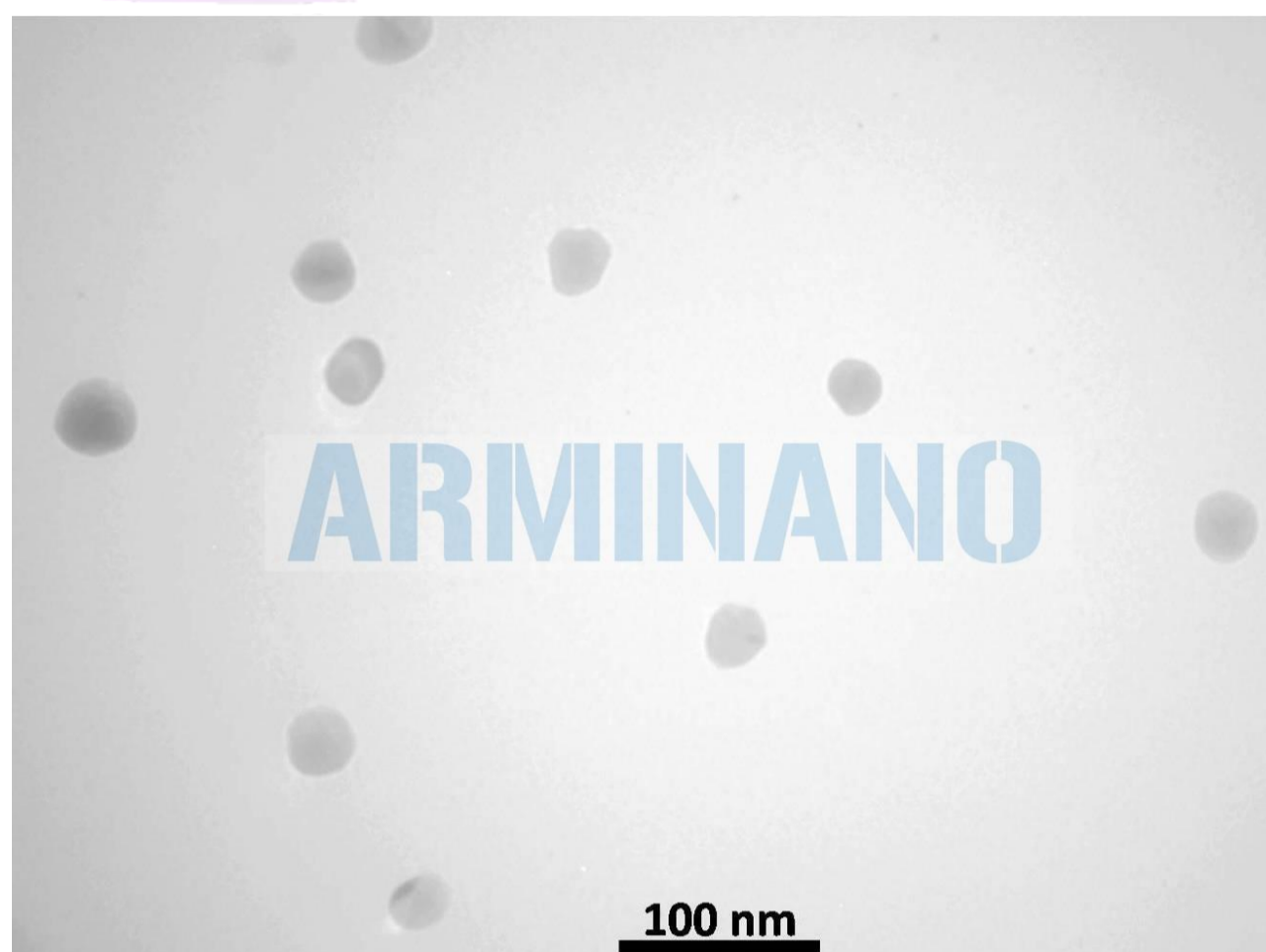
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Do not expose to extreme heat or flame.
Refer to MSDS prior to handling this material.



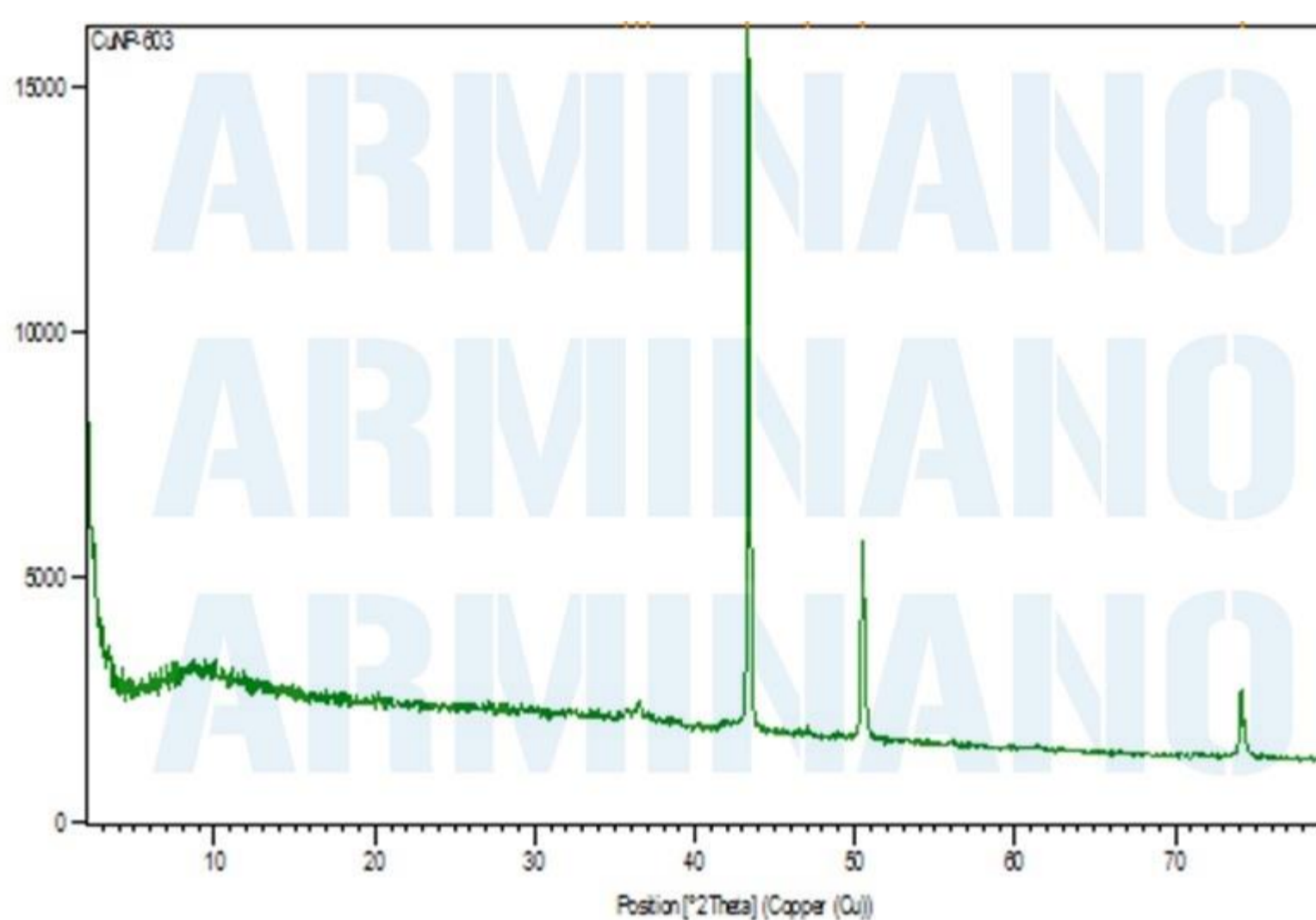
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SEM image of CNP11



TEM image of CNP11



XRD pattern of CNP11

Storage:

- Keep it in cool dry place.
- Avoid direct sunlight.
- Do not freeze.
- To disperse sedimented nanoparticles sonication could be used.

Shelf life:

When stored as specified the product is stable for at least 1 months.