

Copper Nanoparticles CNP11

Description:

Colloidal 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 colloid
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 copper nanocolloid (CNP11)

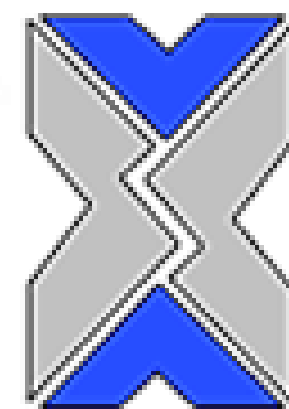
Note: product specifications are subject to amendment and may change over time.

Applications (but not limited to the following):

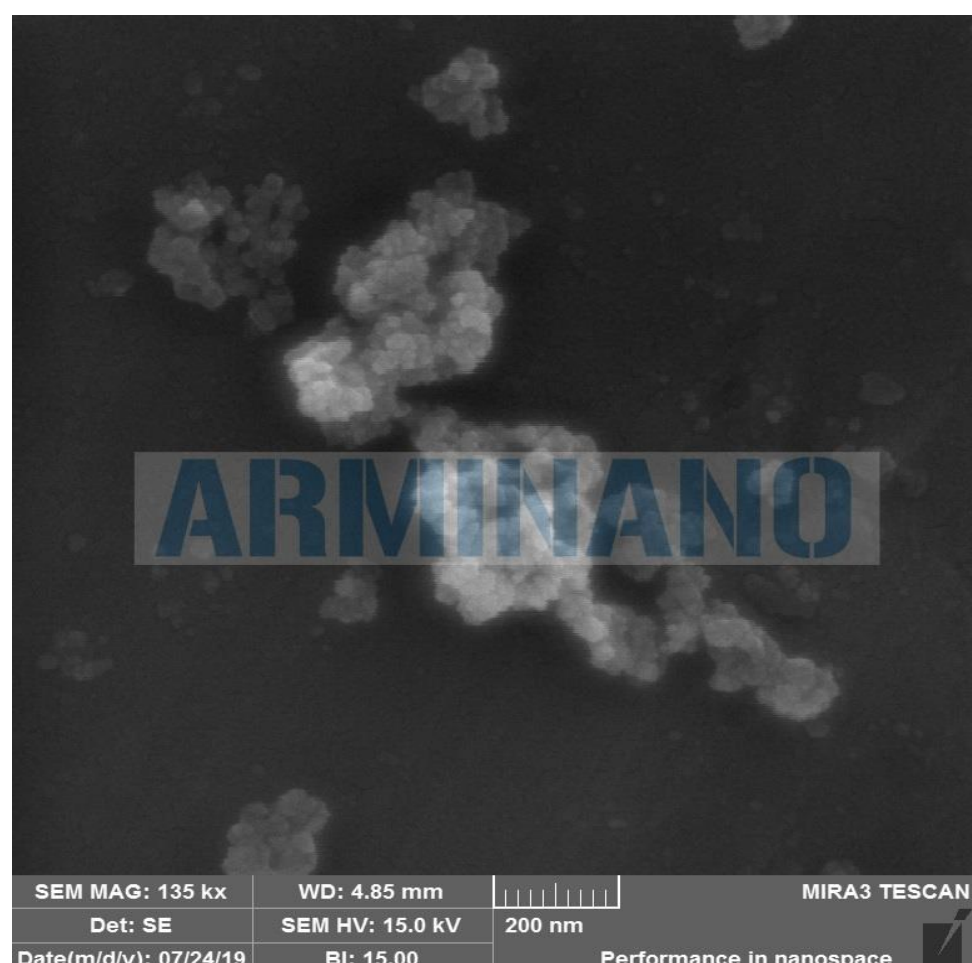
Catalysts, conductive inks and coatings, sintering additives, medicine and anti-bacteria, lubricant additives, heat transfer materials, Integrated circuits, batteries, solar cells, capacitors, radio frequency shielding

Safety:

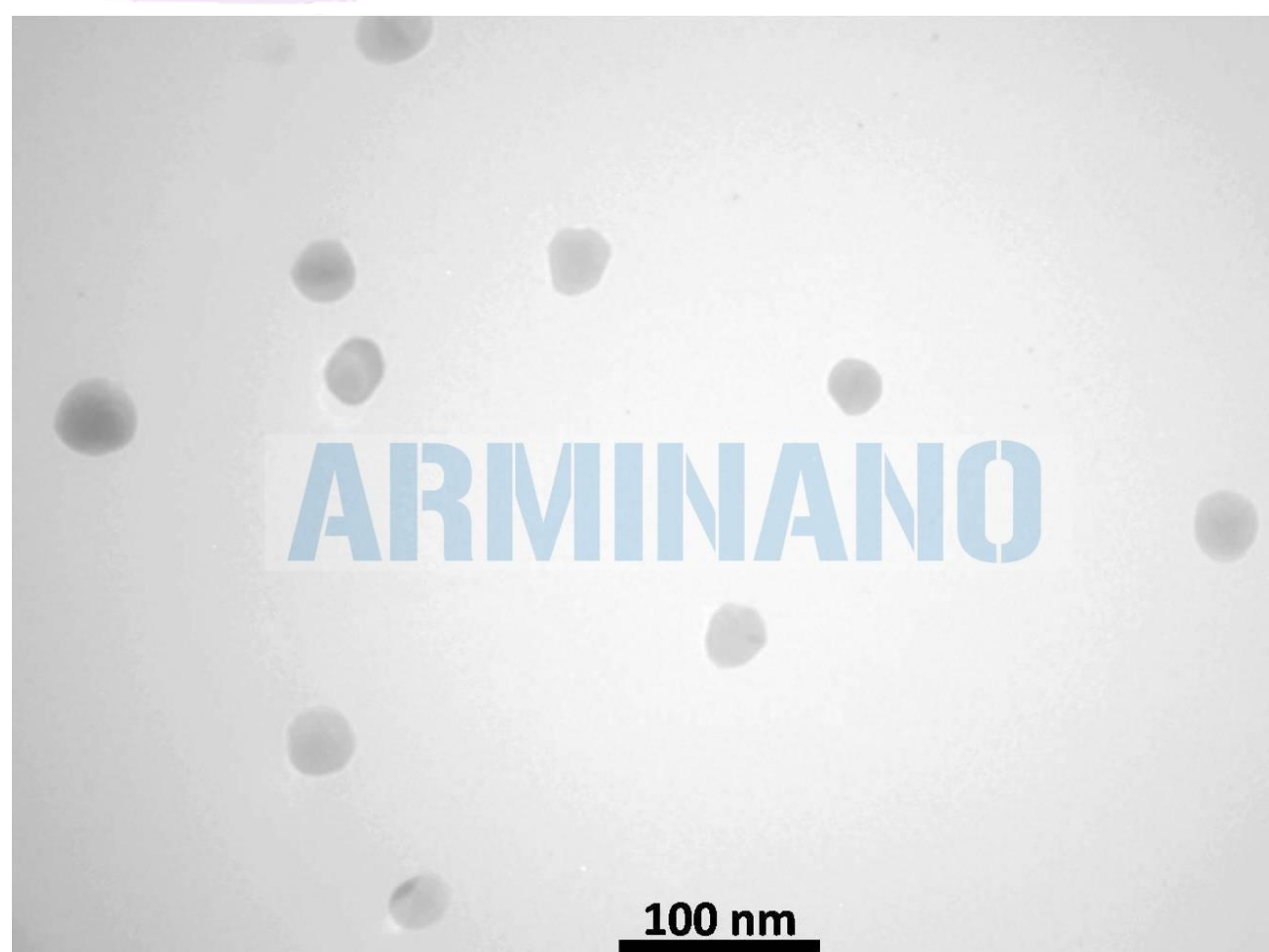
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Do not expose to extreme heat or flame.
Refer to MSDS prior to handling this material.



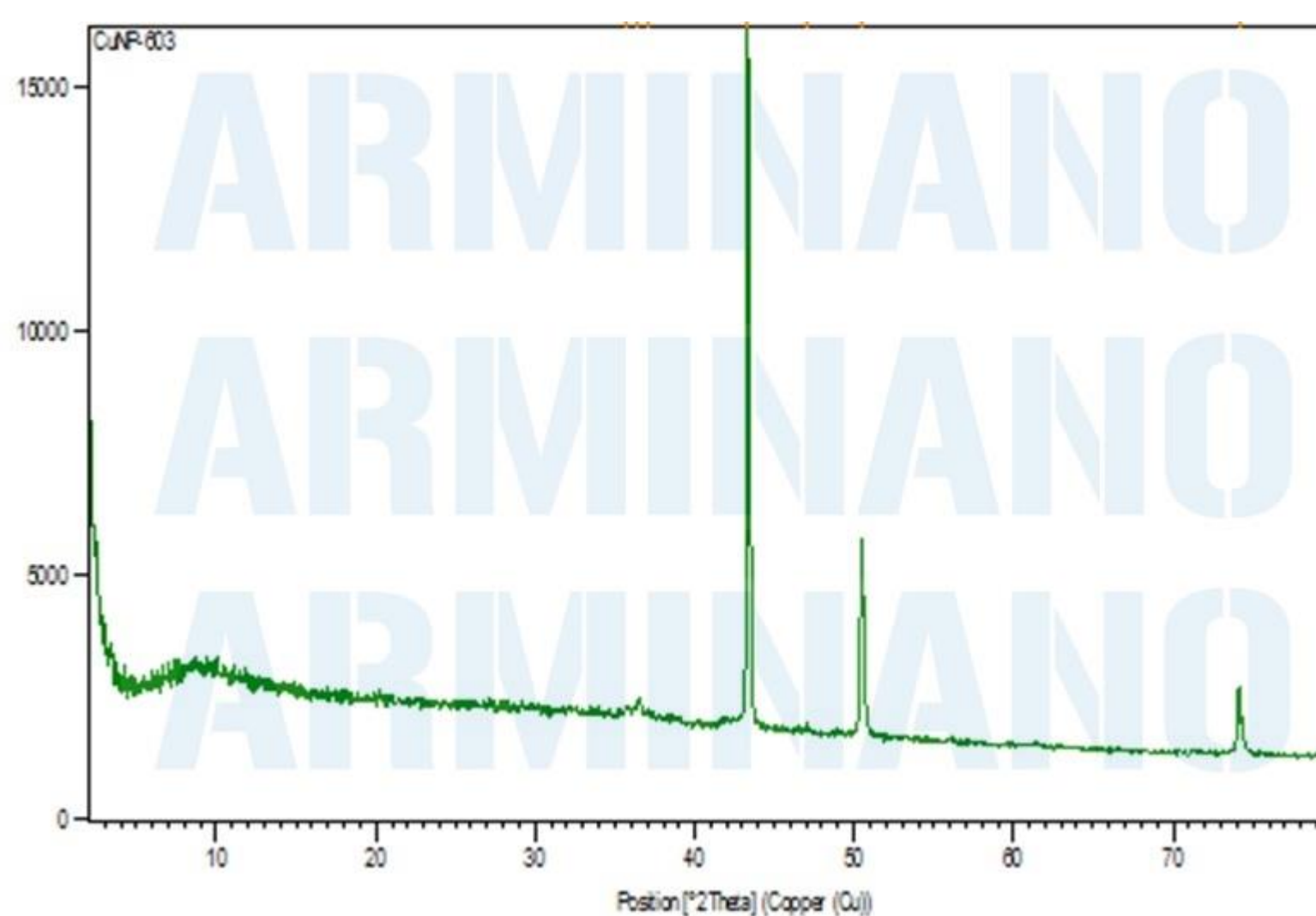
Copper Nanoparticles CNP11



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.