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Silver Nanoparticles
SNP501

Description:

Silver nanoparticles, generally smaller than 100 nm have distinct physical, chemical and biological properties compared to the bulk material. The optical, thermal, and catalytic properties of silver nanoparticles are strongly influenced by their size and shape. These nanoparticles have been widely used in microelectronics and medical products due to its antimicrobial ability.

Characterization	
CAS	7440-22-4
Stock No.	SNP501
Molecular formula	Ag
Molecular weight (g/mol)	107.87
Form	Powder
Color	Gray
Morphology	Spherical
Crystal structure	FCC
Size range (nm)	10-60
Total impurity (%)	3
Oxide density (g/cm3)	N/A
Melting point (˚C)	961.78
Boiling point (˚C)	2162
Density (g/cm3)	10.5
Solubility	Insoluble

Image of silver nanopowder (SNP501)

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

Applications (but not limited to the following):

Biosensors, catalysts, chemical sensors, conductive coating, conductive inks, data storage, EMI/RFI shielding, high thermal conductivity materials, medical fields, sterilizer, antibacterial packaging.

Safety:

Avoid breathing dust.
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Refer to MSDS prior to handling this material.

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A mission for sustainable future

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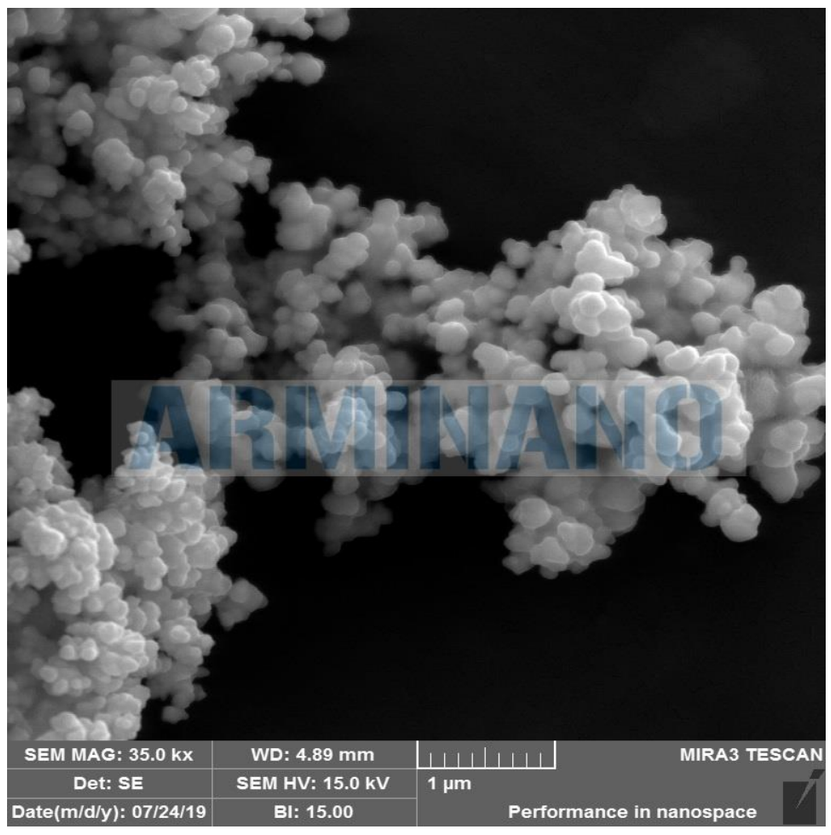
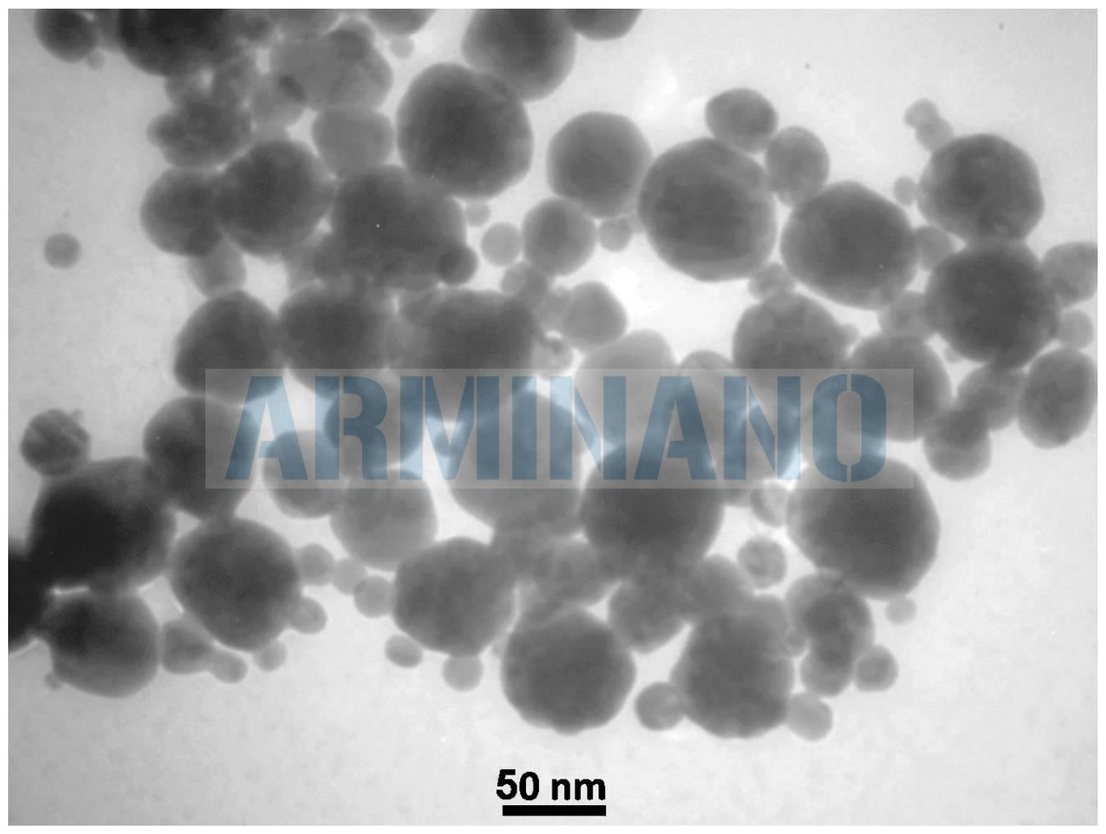
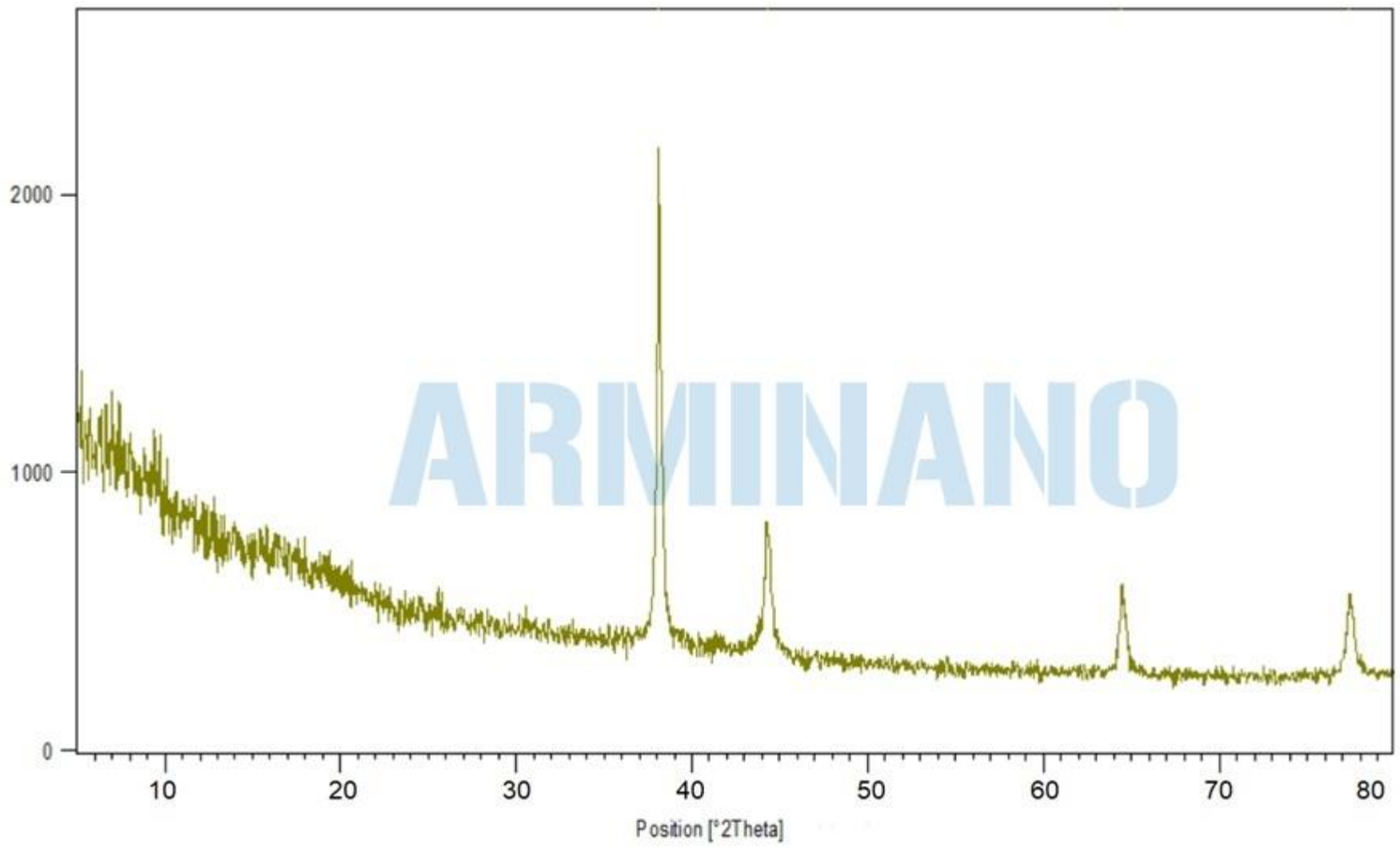


SEM image of SNP501



TEM image of SNP501



XRD pattern of SNP501

Storage:

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

Shelf life:
When stored as specified, the product is stable for at least 6 months.

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