

# Borhan Nano Scale Innovators Knowledge-Based Co.

# Silver (Ag) Nanoparticles

#### Introduction

Silver nanoparticles are widely used in numerous technologies due to their unique optical, electrical, thermal and antibacterial properties.

### **Specifications**

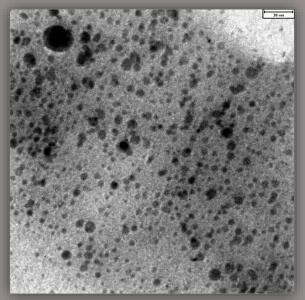
Molecular formula	Ag
Molecular weight	107.8682
Morphology	Spherical
Color	Dark green
Size (nm)	Less than 20
Form	Nanopowder
CAS No.	7440-22-4

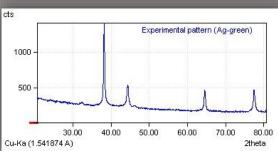
## **Applications**

- Antimicrobial coatings
- Biomedical devices
- Wound dressings
- Biological and chemical sensors
- Photovoltaics
- Conductive inks, pastes and fillers
- Molecular diagnostics and photonic devices
- Textiles and footwear
- Kevboards
- Water Treatment
- Paints
- Cosmetics
- Plastics
- Appliances

#### **Advantages**

- Environmentally friendly
- Highly stable
- Non-irritating and non-allergenic
- Anti-fungal and anti-inflammatory effects
- No causing of antimicrobial resistance
- High electrical conductivity
- Low sintering temperatures





Sample	Strains	
	E.Coli ( ATCC® 25922TM)	
	MIC	MBC
Ag	125 μg/ml	500 μg/ml





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