

# Nano Colloidal Ag

## Characterization and Description

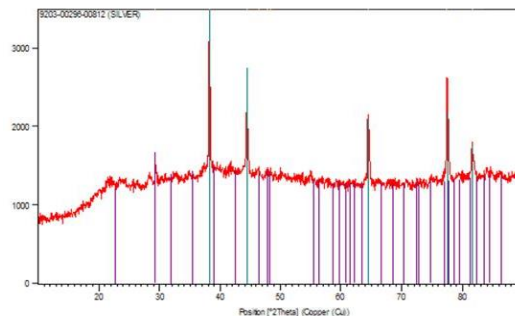
Product Identification	
Product Name	A302
Chemical name	Nano silver colloid
Chemical Formula	Ag
Intended use	Anti-bacterial and Anti -static Additive

Physical / Chemical Properties	
Physical state	Colloid
Properties & Use	Antibacterial
Appearance	Transparent-Dark Brown
Odor	None
Concentration	4000 ppm
Average particle size (APS)	15 nm
Product features	cosmetic material, Medical Materials, textile, coating & resin, plastic

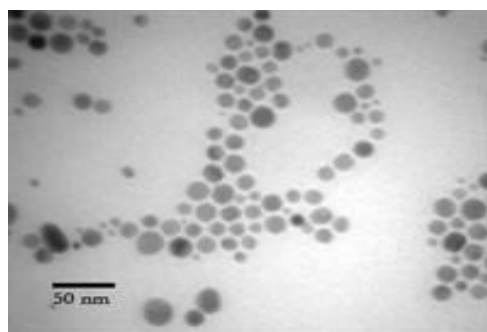
Chemical Specification	
Solvent	deionized water, Mono ethylene glycol (MEG)

## Nano silver Colloid

### XRD of the prepared Silver



Nanoparticles



TEM image of Nano - Silver

### Product Information

- 1.Type: colloid
- 2.Size: 15 nm
- 3.Color: Transparent-Dark Brown
- 4 Specific surface area: 30-50  $m^2/gr$
- 5.Morphology: Spherical
- 6.Formula: Ag
- 7.Concentration: 4000 ppm

### Application Categories

1. Academic Research
2. Chemical R&D
3. textile and polymer industrial
4. Medical Materials
5. Food & Beverage
6. Color industry
7. Ceramic - tile industry



## Application

Silver is known for its antibacterial, antimicrobial and anti-inflammatory properties. Coating of metallic silver and its salts are popularly used in medicinal purposes and in medical devices. The larger surface area to volume ratio and greater reactivity of nano-silver are prominently used in modern biomedical applications, drug delivery, textile, food and ceramic industry.

## Mixing

**Instructions:** Depending on your application and industry varies between % 0.5 to % 3 wt.

