

## Summary of Properties for Silver

Property	Particles <sup>1</sup>	Atoms	Ions
Increases conductivity of a solution it is added to	N	N	Y
Tyndall Effect	Y	N	N
Can be separated from solution by centrifugation	Y	N	N
Properties will change if an electron is added	N	N	Y
Properties will change if an electron is removed	N	Y	N
Combines readily with anions	N	N	Y
Combines readily with cations	N	N	N
Water soluble	N	N	Y
Exists as a single entity in solution with its peers	Y	N	Y
Measurable with an Ion Selective Electrode	N	N	Y
Measurable by Atomic Absorption Spectrophotometer	Y	Y	Y
Measurable by a Spectrophotometer	N	N	Y
Possesses ionic charge	N	N	Y
May possess particle charge	Y	N	N
Combines with polar molecules	Y	N	Y
Negative zeta potential in low ionic solutions	Y	N	N
Measurable with Photon Correlation Spectrometer	Y	N	N
Can be separated from solution by filtration	Y	N	N
Precipitates from solution onto cathode when an electric current is passed through the solution	N	N	Y

Notes: 1 Particles – in this context, a particle is defined as a cluster of atoms.