

SILVER AQUEOUS DISPERSION

BioQTN Silver Ag has an innovative synthesis of silver nanoparticles, based on silver reduction, by an unprecedented combination of polysaccharides of marine origin and a reducing agent. Nanoparticles produced with **BioQTN** technology present several advantages, among them, we can highlight its biocompatibility, respecting eco-synthesis and collaborating with the protection of the environment.

IDENTIFIERS

- EC N°: 231-131-3
- N° CAS: 7440-22-4
- UN 3082
- N° REACH: A registration number is not available for this substance, since the substance or its uses are exempt from registration, the annual tonnage does not require registration, or this registration is scheduled for a later date.
- WGK Germany: 3

STORAGE

Store the product at temperatures between 2 °C and 8 °C and protected from sunlight.

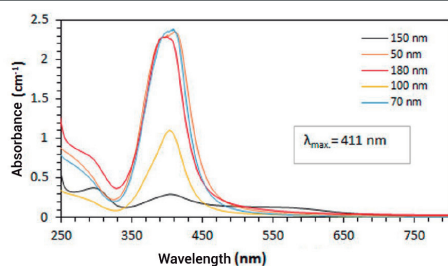
PRESENTATION

Plastic flasks containing 1 liter.

PRODUCT PHYSICOCHEMICAL DATA

- **Molecular weight:** 107.87 g/mol
- **Color:** light yellow to brown
- **Physical State:** liquid
- **Particle diameter (TEM):** 20-190 nm
- **Nanoparticle concentration:** 0.6 mg/ml
- **Density at 20 °C:** 0.991±0.04 g/ml
- **Morphology:** spherical
- **Zeta potential:** 33.8±1.9 mv
- **pH:** 3.6±0.5
- **Purity:** 97%
- **Particle surface:** sodium citrate and polysaccharide
- **Solvent:** water
- **Hydrodynamic diameter of nanoparticles:** (DLS) – (based on ISO 13320): 45-190 nm
- **BET surface area:** 2.2±0.2 m²/g

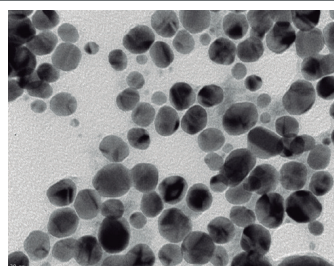
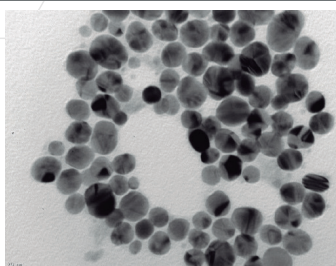
OPTICAL PROPERTIES



INSTRUMENTATION

- **Diameter and morphology:** TEM Zeiss EM902 A
- **Spectral properties:** PG INSTRUMENTS-T80 UV-VIS spectrometer
- **Hydrodynamic Diameter / Zeta Potential:** Malvern Zetasizer nano zs

MORPHOLOGY



BRinova guarantees that, at the time of launch or on the date of the subsequent new test, this product follows the information contained in this publication.

