

SILVER AQUEOUS DISPERSION

BioQTN Silver Ag has an innovative synthesis of silver nanoparticles, based on silver reduction, through an unprecedented combination of polysaccharides of marine origin and a reducing agent. Nanoparticles produced with BioQTN technology present several advantages, among them, their biocompatibility.

IDENTIFIERS

- EC Nº: 231-131-3
- Nº CAS: 7440-22-4
- UN 3077 9 / PGIII
- Nº 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

Storage temperature ranges: 2-8 °C (**recommended temperatures**); 9-25 °C (**acceptable temperatures**). **Do not freeze. Protect from sunlight and heat.**

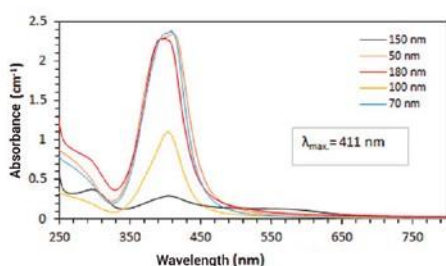
PRESENTATION

Plastic flasks containing 1 and 5 liters.

PRODUCT PHYSICOCHEMICAL DATA

- **Molecular weight:** 107.87 g/mol
- **Color:** light yellow to brown
- **Physical state:** Liquid
- **Total silver concentration:** 0.2-2 mg/ml
- **Density at 20 °C:** 0.991 ± 0.04 g/ml
- **Morphology:** spherical
- **Zeta potential:** 33.8±1.9 mV
- **pH:** 3.5±0.5
- **Purity:** 97 %
- **Particle surface:** sodium citrate and polysaccharide
- **Solvent:** water
- **Hydrodynamic diameter of particles (DLS)** – (based on ISO 13320): <2 µm
- **Specific surface area (BET):** 2.2± 0.2 m²/g
- **Endotoxin concentration:** 0.0998 ± 0.0006 EU / ml
- **Recommended retest period:** 9 months

OPTICAL PROPERTIES



INSTRUMENTATION

- **Spectral properties:** PG Instruments-T80 UV-VIS spectrometer
- **Hydrodynamic diameter/Zeta potential:** Malvern Zetasizer nano ZS
- **Endotoxin concentration:** ToxinSensor™ Endotoxin Detection System: ToxinSensor™ Chromogenic LAL Endotoxin Assay kit, GenScript, Instructions Kit, 2020.

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.

