



TECHNICAL DATA SHEET

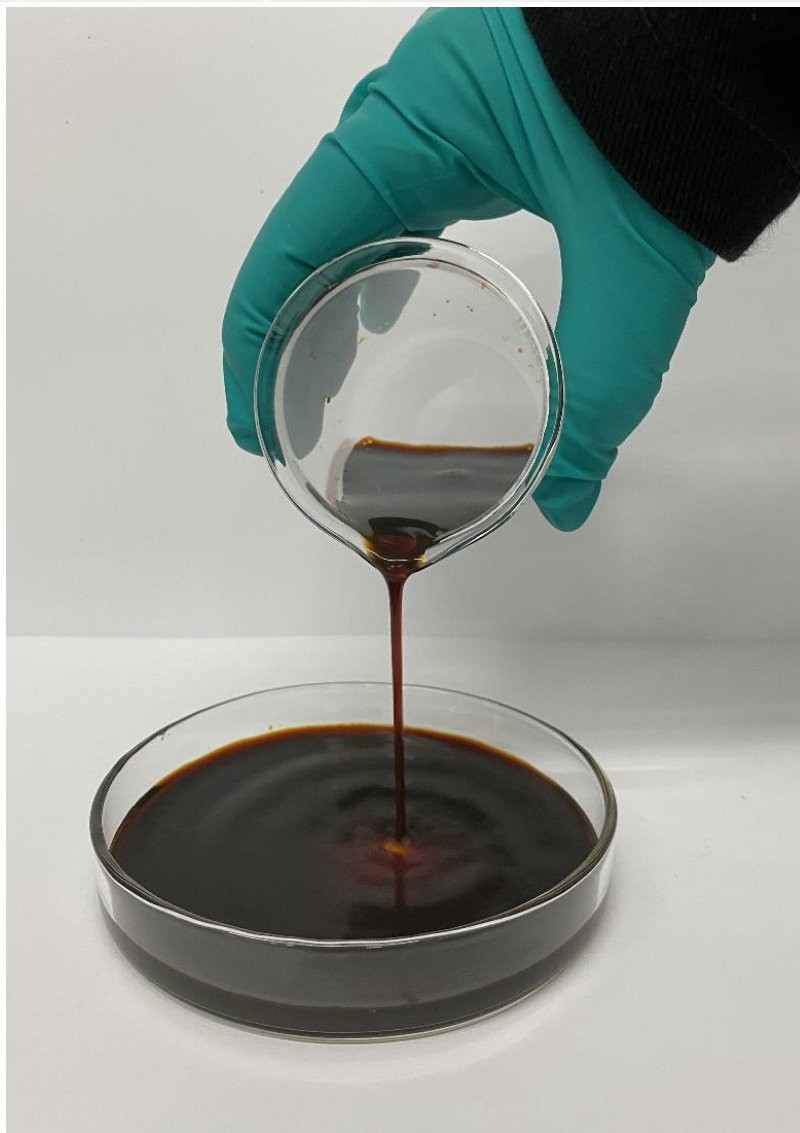
Nanum® Silver Nanoparticles

Description

Nanum® Silver Nanoparticle is a premium-quality aqueous solution containing uniformly dispersed silver nanoparticles. It is produced using advanced purification and dispersion methods that guarantee exceptional stability and homogeneity. It enhances the antimicrobial properties of coatings, improves material conductivity, and offers innovative biomedical solutions.

Application

Silver nanoparticles have a wide range of applications across various sectors due to their antimicrobial and conductive properties. In the field of electronics, silver nanoparticles play a crucial role in printed electronics and conductive materials. They enable the fabrication of flexible electronic devices and enhance their conductivity. In the healthcare sector, they are used in advanced dressings to accelerate wound healing and prevent infections. In consumer products, such as textiles and food packaging, silver nanoparticles are incorporated to impart antimicrobial properties, which enhances their durability and safety. Moreover, they are employed in water and air purification technologies, as well as surface coatings for corrosion protection.



Properties:

Product name:	Silver Nanoparticles
Dispersion vehicle:	Aqueous
Dispersion Concentration (ppm):	4000
Physical form:	Brown liquid
Average lateral size (nm):	50
Average area (nm ²):	800
Average lateral thickness (nm):	13



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Nanum[®] Silver Nanoparticles

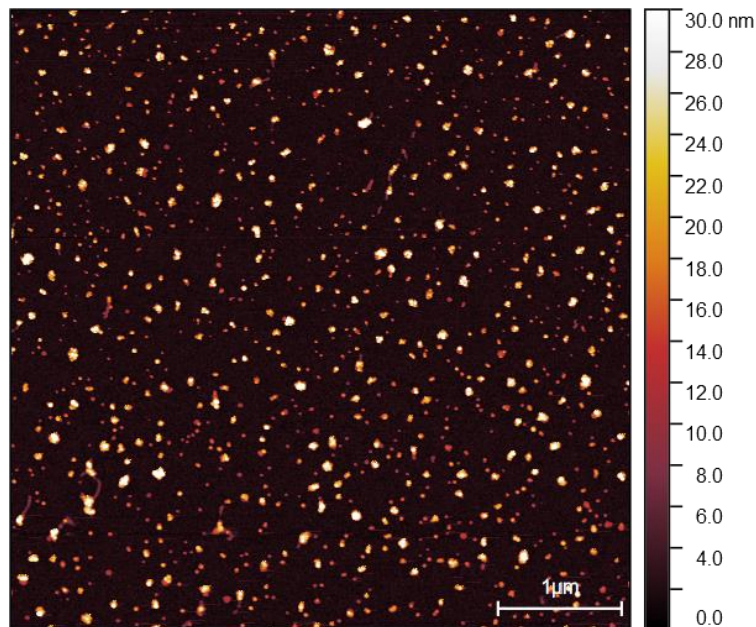


Shelf life

The dispersion should be stored in a cool dry place protected by light with optimal temperature range for storage between 41 °F - 95 °F (5°C - 35 °C). This product has a shelf life of 1 year from the manufacture date when stored under the mentioned conditions. Exposing the dispersion to higher or lower temperatures may cause loss of its properties and performance.

Dispersion Volume

Custom volume upon client request.



Atomic Force Microscopy image of the silver nanoparticles

Notes

This Silver Nanoparticle dispersion is produced according to a certified ISO 9001:2015 Quality Management System and NANUM warrants all reported specifications. However, satisfactory results from the dispersion use are related to individual formulation and operational procedures. Users are responsible for testing and to determine if our product will perform as expected. All analyses were performed at a temperature of 25°C (77 °F).

