

Colloidal Silver — Product Information

Overview

Colloidal Silver is a stable aqueous suspension of sub-micron / nanoscale silver particles in purified water. Siddhi Trading supplies formulation-grade colloidal silver optimized for cosmetics, topical antiseptic adjuncts in formulations, and R&D; applications. Product grades and concentrations are adjustable to customer specifications.

Key properties (non-therapeutic)

- Stable aqueous suspension with controlled particle size distribution.
- Low ionic silver content where requested (reduced free Ag+).
- High shelf stability in amber/opaque containers; minimal agglomeration.
- Customizable concentrations (commonly 5–50 ppm for formulations).

Typical Specifications (representative)

Appearance	Clear to faintly yellow/amber aqueous suspension
Particle size (TEM)	1 – 50 nm (typical; batch CoA will list measured distribution)
Hydrodynamic size (DLS)	5 – 100 nm (depends on stabilizer and concentration)
Silver concentration	5 – 50 ppm (customizable)
Ionic silver (Ag+)	<1% to 10% of total silver (controlled)
pH	5.5 – 8.0 (formulation-dependent)
Solvent	Purified water (USP/EP grade)
Preservative/Stabilizer	None (ultra-pure) or approved stabilizer on request
Shelf life (unopened)	12–24 months (amber bottle, cool storage)
Transport	Non-regulated (aqueous, non-DG) — verify per local rules

Applications

- Cosmetics: formulated into creams, gels, lotions, and serums as a preservative adjunct or functional ingredient (observe regulatory limits).
- Topical personal care: antiseptic adjunct in cleansers and wound-care adjunct formulations (claims must follow local regulations).
- Pet care formulations: topical applications for animal grooming and skin care (formulation-specific approvals required).
- R&D; and material science: conductive inks, antimicrobial surface coatings (industrial use), and lab research.

Recommended Usage & Formulation Guidance

Typical inclusion rates vary by application. For cosmetic topical formulations, common use levels range from 0.01% to 0.5% (equivalent to approx. 1–50 ppm silver in finished product) depending on desired functionality and regulatory constraints. Add during the cool-down phase unless otherwise specified. Conduct compatibility testing

for each formulation; monitor pH and ionic strength to maintain colloidal stability.

Safety & Regulatory Notes

Do not market colloidal silver with unapproved medical claims. Regulatory status varies by country: in many jurisdictions, products making therapeutic claims require approval. Prolonged ingestion of silver can cause argyria (irreversible skin discoloration); internal use claims should be avoided unless supported by approved registrations. Provide SDS on request. Use normal PPE when handling concentrated stocks (gloves, eye protection).

Quality & Analytical Testing Available

- ICP-MS for total silver and trace metal analysis (CoA available per batch).
- TEM/SEM for particle morphology and primary size distribution.
- DLS for hydrodynamic size and zeta potential.
- Microbial testing (TAMC/TYMC) on request.
- Ionic silver quantification and stability study reports available.

Packaging & Storage

Standard packaging: 100 mL amber glass bottles, 500 mL, 1 L, 5 L amber HDPE, and 25 L drums or IBCs for bulk. Store in cool (5–25°C), dark conditions. Avoid exposure to strong light and heat to minimize particle changes.

Ordering & Contact

Siddhi Trading Company Email: vinay@siddhitrading.com Website: <https://siddhi-trading.kytronix.co.in/> MOQ, sample policy, and lead times available on request. Batch CoA and SDS provided with shipments.

Document Control & Disclaimer

Version: 1.0 | Date: 2025-09-26 Information is typical and for guidance only; refer to batch CoA and SDS for specification-critical applications. Siddhi Trading Company is not responsible for end-use compliance — customers must verify regulatory suitability in target markets.