YANMEI COS · Engineering Specification Sheet (`YM-SPEC-SW06`)

> **Snap-Tip Liquid Lipstick Swabs & Single-Dose Active Skincare Cotton Swab Applicators OEM/ODM**

Manufacturer: Guangzhou Yanmei Biotechnology Co., Ltd. (`YANMEI COS` · `https://yanmeicos.com`)
Group GMP Backing: Parent Company Fujian Yanse Cosmetics Co., Ltd. — Bureau Veritas ISO 22716:2007 (`CNSH25778319-ISO22716`) & US FDA Cosmetic GMP (`CNSH25778319-USFDA`)
Two-Tier Agile MOQ: Tier 1 Ready-to-Ship Stock Formulas (`MOQ 5,000 Boxes` , 7–10 Business Days Dispatch, `$0` Mold Fee) · Tier 2 Bespoke Custom Shade/Active & Printed Foil (`MOQ 50,000 Boxes`)
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> **Usage Note**: Everything below in Part III is formatted to international Tier-1 CDMO standards (zero internal BOM cost figures, 100% compliant corporate & certificate attribution, signed by **Alex Gao**). You can copy-paste or export Part III directly to US, EU, UK, Russian/CIS, MENA, LATAM, and APAC brand buyers.

3.1 Executive Summary & Capillary Vacuum-Lock Engineering Architecture

- **Manufacturer**: **Guangzhou Yanmei Biotechnology Co., Ltd. (`YANMEI COS`)** · Official Portal: `https://www.yanmeicos.com`
- **Group GMP & Regulatory Backing**: Parent company **Fujian Yanse Cosmetics Co., Ltd.** holds Bureau Veritas **ISO 22716:2007** (`CNSH25778319-ISO22716`), **US FDA Cosmetic GMP** (`CNSH25778319-USFDA`), China NMPA Production License (`闽妆20250005`), and Certificate of Free Sale (`2025YB2129`) within their stated scope.
- **Core Packaging Physics**: Engineered around a **Medical-Grade Virgin Polypropylene (PP) Capillary Vacuum-Lock Hollow Tube (`ID Ø2.35 mm` standard / `ID Ø4.20 mm` jumbo)** with an **ultrasonic/thermal hermetically sealed blind top**, a **UV-laser precision pre-scored snap ring (`0.13 mm` residual wall, `1.8–2.8 N` clean two-finger snap force)**, and a **high-release short-pile flocked or hydro-entangled combed cotton tip (`≥ 78.5%` liquid release efficiency)**.
- **Zero-Leak Air Cargo Guarantee**: Prior to snapping, atmospheric capillary negative pressure (`68%–72%` calibrated liquid-to-headspace column ratio) locks the liquid inside the shaft even under inverted centrifugation and `ASTM D3078` `-0.08 MPa` (`-80 kPa` / `8,000 m` **air-freight altitude) vacuum testing for 30 minutes**. Once the top color-coded ring is snapped open, air enters the upper chamber and gravity + capillary wicking saturate the bottom applicator tip smoothly within `2.0 – 3.2 seconds` with zero dripping.

3.2 Quantitative Engineering & Laboratory Specification Matrix (TDS — Rev 2026.11)

Parameter Category	Engineering Metric	Test Method / Standard	YANMEI COS Batch Release Spec	Generic Commodity Swab Baseline
Tube Geometry (Slim)	Length / Outer Ø / Inner Capillary Ø	Laser Micrometer (`Cpk ≥ 1.67`)	`78.0 ± 0.5 mm` / `OD Ø3.60 mm` / **`ID Ø2.35 ± 0.05 mm`**	Irregular extruded PP (`±0.25 mm` drift, erratic flow)
Tube Geometry (Jumbo)	Length / Outer Ø / Inner Channel Ø	Laser Micrometer (`Cpk ≥ 1.67`)	`85.0 ± 0.5 mm` / `OD Ø6.00 mm` / **`ID Ø4.20 ± 0.08 mm`**	Not available in commodity lipstick factories
Snap-Ring Ergonomics	Residual Score Wall / Snap Torque	Mecmesin Digital Force Gauge	`0.13 ± 0.02 mm` wall · **`1.8 N – 2.8 N` clean snap** (zero burrs)	`> 5.5 N` hard snap or `< 0.8 N` accidental transit break
Applicator Tip Matrix	Tip Substrate & Liquid Release Rate	Gravimetric Evacuation Assay	**Short-Pile Nylon Flocked Tip / High-Density Combed Cotton (`≥ 78.5%` release)**	Loose absorbent medical cotton (`65%` liquid trapped in cotton)
Rheology & Flow Time	Dynamic Viscosity (`25°C`) & Wicking	Brookfield DV2T Spindle LV-1	**`25 – 85 cP`** · **`28–34 mN/m` surface tension** · **`2.0–3.2 s` full tip saturation**	Pure dye water (`1 cP` , drips on clothes) or thick gloss (fails to flow)
Altitude & Thermal Gate	Vacuum Decay & Freeze-Thaw Stability	`ASTM D3078` & `ICH Q1A(R2)`	**`0.00%` leakage at `−0.08 MPa` (`30 min`)** · `−20°C to +50°C` (3 cycles)	`4%–12%` red-tip pre-leakage during air cargo transit
Microbiological Purity	TAMC / TYMC / Specified Pathogens	`ISO 22716` · `USP <61>/<62>`	**TAMC `< 10 CFU/g`** · **TYMC `< 10 CFU/g`** · *S. aureus / P. aeruginosa* Absent	`100–500 CFU/g` semi-manual workshop filling
Global Export Dossiers	Regulatory & Safety Documentation	US MoCRA / EU CPNP / EAEU / GCC	**COA, MSDS, TDS, CPSR Part A&B, PIF, EU REACH, EAC TP TC 009/2011, SFDA**	Domestic-only paperwork

3.3 The 1+4 High-Margin Product Portfolio & Active Formulation Specifications

1. **SKU `YM-SW01` — Snap-Tip Transfer-Proof Water-Gloss Lip Tint & pH Lip Oil Swabs (Flagship Color Cosmetics)**
2. **Formulation**: Polyurethane film-forming hydro-gloss micro-emulsion + `2.0%` Hydrolyzed Sodium Hyaluronate + `1.5%` Water-Soluble Jojoba Esters + Squalane + Food-Grade Sucralose sweet taste-masking (zero bitter dye aftertaste).
3. **Shades & Packaging**: 12 stock viral shades (Ruby Velvet, Peach Oolong, Brick Terracotta, Cinnamon Chai, Rose Quartz, Clear-to-Pink pH Color-Changing Lip Oil; single-shade or **4-shade assorted 20-swab flip-top cigarette box** with gold tear-tape shrink wrap & 20-cavity anti-shock PET blister tray).

4. **SKU `YM-SW02` — Single-Dose Tripeptide-1 & Vanillyl Butyl Ether Instant Lip Plumper Swabs (Extension #1 · Highest DTC/TikTok Margin)**
5. **Formulation**: `1.0%` Palmitoyl Tripeptide-1 + `0.35%` Vanillyl Butyl Ether (gentle warming micro-circulation boost, zero capsaicin chemical burn) + `0.2%` Menthyl Lactate cooling freshness + Botanical Collagen + Vitamin E. Visibly plumps lip volume within `60 seconds` with mirror-glass shine.
6. **Packaging**: `0.20 mL × 20 swabs` in luxury holographic/hot-stamped cigarette dispenser box or 4-swab purse card pack.
7. **SKU `YM-SW03` — Single-Dose 2% Encapsulated Salicylic Acid (BHA) + Pionin + Tea Tree Acne Spot Treatment Swabs (Extension #2 · Zero Cross-Contamination Blemish Care)**
8. **Formulation**: `2.0%` Cyclodextrin-Encapsulated Salicylic Acid + `0.5%` Potassium Azeloyl Diglycinate + Quaternium-73 (Pionin) + Australian *Melaleuca Alternifolia* (Tea Tree) Leaf Oil + `1.0%` Madecassoside (Centella). Eliminates bacterial re-infection caused by dipping fingers or reusable applicators onto active pustules.
9. **Packaging**: `0.20 mL × 30 swabs` **individually sealed in light-proof PET/AL/PE foil sachets** inside a clinical dermatology dispenser carton.
10. **SKU `YM-SW04` — Single-Dose 10% AHA/PHA Exfoliating Lip Peel & Targeted Facial Resurfacing Jumbo Swabs (Extension #3 · Med-Spa & At-Home Peel)**
11. **Formulation**: `8.0%` Glycolic Acid + `2.0%` Lactobionic Acid (PHA) + `2.0%` D-Panthenol (Pro-Vitamin B5) + Allantoin buffered at **`pH 3.8 ± 0.2`**. Dissolves flaky lip dead skin, smoker's lip dullness, nose blackheads, and T-zone closed comedones in 1 swipe without irritation.
12. **Packaging**: **`1.20 mL × 10 Jumbo Swabs`** **(`OD Ø6.0 mm` wide-bore tube + oversized spiral-ribbed cotton head)** individually foil-pouched per treatment.
13. **SKU `YM-SW05` — Hygienic Retail Counter Makeup Tester Swabs, Post-Laser PDRN Repair & 12% PAP Teeth Whitening Swabs (Extension #4 · Sephora/Retail & Clinic B2B Essential)**
14. **3 Sub-Configurations**:
    - **5A (Retail Counter Hygienic Lip/Concealer Tester Swabs)**: Pre-filled with your brand's exact lipstick/lip oil/liquid blush shades (`0.25 mL` beveled flocked doe-foot tip) in 50-count counter dispenser boxes—eliminates shared retail tester hygiene hazards while boosting in-store conversion by `28%+`.
    - **5B (Clinical Post-Microneedling / Post-Laser Sterile-Filtered 1% Salmon PDRN + Ectoin Targeted Repair Swabs)**: `0.22 µm` sterile-filtered preservative-free soothing serum in individual medical foil pouches.
    - **5C (12% PAP Phthalimidoperoxycaproic Acid + Nano-Hydroxyapatite Peroxide-Free Instant Teeth Whitening Swabs)**: Zero-sensitivity enamel stain eraser swabs for post-coffee/wine touch-ups (`0.25 mL × 20 or 50 swabs`).

3.4 Two-Tier Agile MOQ, Packaging & Sampling Schedule

- **Tier 1 Pilot Launch (`MOQ 5,000 Boxes / SKU`)**: Validated stock shades & clinical formulas + stock medical PP capillary vacuum-lock tubes + **100% custom-printed retail boxes** (`$0` tooling fee, `7–10 business days` dispatch).
- **Tier 2 Custom Mass Retail (`MOQ 50,000 Boxes / SKU`)**: Custom Pantone shade matching, bespoke active concentrations, custom snap-ring color, shaft pad-printing & individual rotogravure foil sachets (`18–22 business days`).

- **48-Hour DHL/FedEx Benchmark Sample Kit**: Request the 5-SKU functional swab sample kit & confidential A/B tiered FOB quotation sheet at `https://yanmeicos.com/snap-swab-applicators-manufacturer` or email **Alex Gao** (`alex@yanmeicos.com`).