

Technical Data Sheet: Acidity Test Kit for Cosmetics

Product Code: SS-AC-01

Brand: SURE Scientific

Application: Rapid colorimetric test of cosmetic acidity for skin compatibility and technical pre-screening.

1. PRODUCT OVERVIEW

The **SURE Scientific Acidity Test Kit** is an infrastructure-independent diagnostic tool for the rapid, on-site pH auditing of cosmetic formulations without digital probes or sample preparation.

- **Physiological Skin Compatibility Monitoring:** Verifies that cosmetics fall within the safe, non-irritating limits of the skin’s natural acid mantle.
- **Mercury Test Kit Pre-Screening Validation:** Serves as a mandatory diagnostic gatekeeper prior to heavy metal analysis. Cosmetic samples with extreme acidity (pH < 3.5) interfere with chromogenic indicator chemistry, that can trigger inaccurate false-positive shifts in the *SURE Scientific Mercury Test Kit*. This pre-test isolates low-pH matrix interference and ensures absolute downstream screening integrity.

2. KEY FEATURES

- **High Visual Selectivity:** Calibrated specifically to trigger sharp, unmistakable colorimetric alerts at critical cosmetic safety and technical testing thresholds.
- **Technical Pre-Test Verification:** Actively serves as a mandatory pre-screening step for the *SURE Scientific Mercury Test Kit*. Because highly acidic cosmetic samples below pH 3.5 can trigger false-positive pink shifts or degrade indicator reagents in the mercury assay, this kit confirms sample suitability to guarantee downstream reliability.
- **Instantaneous Field Readout:** Yields visual color responses within 1–2 minutes.
- **Standardized Workflow Capacity:** Perform 20 independent sample screenings per kit package.
- **100% Infrastructure Independent:** Designed completely for ambient-temperature operation without requiring digital pH probes or laboratory meters.

3. KIT COMPONENTS

Each single kit package provides sufficient testing materials for 20 field evaluations:

- **Acidity Test Reagent (1 Dropper Bottle):** A proprietary, stabilized indicator solution optimized for specific cosmetic pH thresholds.
- **Test Vessels (20 pieces):** Disposable plastic polystyrene spoons for sampling and containment.
- **Standard Color Chart:** A gradient reference scale printed directly on the exterior envelope.
- **Instruction Manual:** Step-by-step user guide for non-laboratory personnel.

4. TECHNICAL SPECIFICATIONS

Parameter	Specification
Detection Method	Colorimetric (Visual Color Development)
Optimized Standard Range	pH 3.5 to 7.5 (Industrial Cosmetic Standard)
Critical Cut-Off Threshold	pH < 3.5 (Triggers Acidic Alert status)
Testing/Reaction Time	1-2 minutes
Kit Capacity	20 samples per kit package
Sample Matrix	Topical cosmetic creams, and skin-whitening lotions
Operating Temperature	20°C - 35°C (Ambient)
Storage Temperature	2–8°C (Keep refrigerated for optimal reagent shelf-life)
Shelf Life	12 months from manufacture (at 2-8 °C, unopened)

5. INSTRUCTIONS FOR USE

1. **Sampling:** Using a clean testing spoon, place a pea-sized scoop of the cosmetic cream into the center of the spoon bowl.
2. **Reagent Addition:** Dispense exactly 1 drop of the Acidity Test Reagent solution directly onto the cream sample.
3. **Homogenization:** Thoroughly mix the reagent into the cosmetic matrix using the tip of a clean sampling tool for 10–20 seconds.
4. **Incubation:** Allow the mixed reaction spoon to stand at ambient temperature for 1–2 minutes.
5. **Evaluation:** Read the developed color profile immediately by comparing the sample against the standard color chart printed on the envelope.

6. RESULT INTERPRETATION

Read all outcomes under a bright, natural, or stable white LED light source:

- **STANDARD (Negative Status):** The mixture demonstrates no significant color change and gives green to blue color. This indicates the cosmetic product falls safely within the standard physiological and industrial cosmetic range (pH 3.5–7.5), confirming the sample is perfectly suitable for subsequent screening with the *SURE Scientific Mercury Test Kit*.
- **ACIDIC (Positive Alert Status):** The mixture shifts distinctly into a vibrant Yellow color within the incubation window. This alerts the operator that the sample is highly acidic (below pH 3.5). *Note: If this status is triggered, the sample cannot be immediately tested for mercury due to acidic matrix interference.*

7. STORAGE AND STABILITY

- **Transport Status:** Stable at ambient temperatures during standard shipping transit windows.
- **Long-Term Storage:** Keep refrigerated at 2–8°C immediately upon arrival. Do not freeze.
- Keep away from direct sunlight and extreme heat to prevent reagent degradation.
- Ensure the caps of Reagent bottles are tightly sealed immediately after use to prevent evaporation and air oxidation.

8. SAFETY AND HANDLING

- **First Aid:** In case of skin or eye contact, rinse immediately with plenty of water. If irritation persists, seek medical advice.
- **Disposal:** Dispose of used test spoons and chemical waste in accordance with local environmental regulations.

9. LIMITATIONS AND LEGAL DISCLAIMER

- **Semi-Quantitative Limit:** This product operates strictly as a semi-quantitative screening assessment tool for field audits. It is not a calibrated diagnostic device, and its results do not constitute standalone, legally admissible proof of product compliance or contamination.
- **Confirmatory Requirements:** Extreme pH levels or potential skin sensitivities flagged by this kit must be independently confirmed using a calibrated digital pH meter or through certified laboratory analysis.
- **Liability Limitation:** SURE Scientific's commercial liability is strictly restricted to product replacement or a direct refund of the kit packaging purchase price. The manufacturer explicitly disclaims all civil or financial liability for commercial revenue drops, subsequent health outcomes, or legal outcomes resulting from field testing actions.

MANUFACTURER INFORMATION

SURE Scientific Co., Ltd.

Contact/Support: www.facebook.com/mercurytestkit