QUALITY ASSURANCE AND TESTING STANDARDS

JANUARY 2026

POLICY NUMBER: TMG-SEC-012
APPROVAL AUTHORITY: BOARD OF DIRECTORS

THE MAZI GROUP

1. PURPOSE

This Quality Assurance and Testing Standards policy establishes comprehensive testing requirements and quality assurance practices for all products developed and sold by The Mazi Group. This policy ensures that products across all brands—Mazi Beauty, Glam Switch, On The Go Mists, and Upvendo—meet the highest standards of quality, safety, and performance before reaching consumers.

2. SCOPE

This policy applies to:

- All products developed, manufactured, or distributed by The Mazi Group
- All product categories: cosmetics, electronics, software, hygiene products, and technology solutions
- All stages of product development: design, prototyping, manufacturing, and post-market
- All testing activities: internal, contract laboratory, and third-party
- All geographic markets and regulatory jurisdictions

3. QUALITY ASSURANCE PRINCIPLES

- Quality is built into products, not inspected in
- Prevention is preferred over detection
- Testing requirements are risk-based and scientifically justified
- All testing must be documented and traceable
- Continuous improvement drives quality excellence

4. TESTING REQUIREMENTS BY PRODUCT CATEGORY

4.1 Cosmetics and Personal Care (Mazi Beauty)

Safety Testing

- Dermatological safety assessment
- Patch testing for skin irritation and sensitization
- Ocular safety testing (for eye-area products)

- Photosafety testing (for products with photosensitive ingredients)
- Toxicological risk assessment

Stability Testing

- Accelerated stability (40°C/75% RH for 3-6 months)
- Long-term stability (25°C/60% RH for 12-36 months)
- Freeze-thaw cycling
- Photostability testing
- In-use stability testing

Microbiological Testing

- Microbial limits testing per USP <61>
- Absence of specified organisms per USP <62>
- Preservative efficacy testing (challenge testing)
- Water activity testing

Performance Testing

- Efficacy testing for product claims
- Sensory evaluation
- Consumer perception studies
- Instrumental measurements (color, viscosity, pH)

4.2 AI-Enabled Devices (Glam Switch)

Electrical Safety

- Electrical safety testing per IEC 62368-1
- UL certification for North America
- CE marking requirements for EU
- Insulation resistance and dielectric strength
- Ground continuity testing

Electromagnetic Compatibility (EMC)

- Emissions testing (radiated and conducted)
- Immunity testing
- FCC Part 15 compliance (US)

- CE EMC Directive compliance (EU)

Battery Safety

- UN 38.3 transportation testing
- IEC 62133 battery safety
- Overcharge and over-discharge protection
- Thermal runaway testing
- Short circuit protection

Environmental Testing

- Temperature cycling (-20°C to 60°C)
- Humidity testing
- Drop testing (1.5m onto concrete)
- Vibration testing
- Dust and water ingress (IP rating)

Software and AI Testing

- Functional testing
- Performance and load testing
- Security testing and penetration testing
- AI model validation and bias testing
- User acceptance testing
- Regression testing for updates

4.3 Antibacterial Products (On The Go Mists)

Efficacy Testing

- Antimicrobial efficacy per EPA requirements
- Time-kill studies
- EN 1276 (bactericidal activity) for EU
- EN 13697 (surface disinfection) for EU
- Virucidal testing where claimed

Safety Testing

- Acute toxicity studies

- Skin irritation and sensitization
- Eye irritation
- Inhalation safety (for spray products)

Stability and Compatibility

- Chemical stability
- Container compatibility
- Spray pattern and delivery testing
- Propellant stability (for aerosols)

4.4 Technology Products (Upvendo)

Hardware Testing

- Electrical safety certification
- EMC compliance
- Environmental stress testing
- Reliability and durability testing
- Touchscreen performance testing
- Payment terminal certification (PCI PTS)

Software Testing

- Functional testing
- Integration testing
- Performance testing under load
- Security testing (PCI DSS compliance)
- Accessibility testing (WCAG 2.1)
- Usability testing

5. TESTING LABORATORIES

5.1 Internal Testing

- Maintain qualified internal testing capabilities
- Calibrate and maintain equipment per schedules
- Train and qualify testing personnel

- Follow documented test procedures

5.2 Contract Laboratories

- Use ISO 17025 accredited laboratories
- Qualify laboratories before use
- Conduct periodic audits of contract labs
- Maintain quality agreements

5.3 Third-Party Certification

- Use recognized certification bodies (UL, TÜV, SGS, Intertek)
- Obtain required certifications before market launch
- Maintain certification through surveillance audits
- Update certifications when products change

6. TEST DOCUMENTATION

6.1 Test Protocols

- Document test methods and acceptance criteria
- Reference applicable standards
- Define sample sizes and sampling procedures
- Specify equipment and materials
- Obtain protocol approval before testing

6.2 Test Reports

- Document all test results completely
- Include raw data and calculations
- Identify test samples and conditions
- Record any deviations or observations
- Obtain appropriate review and approval

6.3 Record Retention

- Retain test records per TMG-SEC-005: Records Management Policy

- Minimum retention: product shelf life plus 3 years
- Maintain records in accessible format
- Protect records from loss or damage

7. QUALITY CONTROL TESTING

7.1 Incoming Materials

- Test or verify incoming materials per specifications
- Review certificates of analysis
- Conduct identity testing for raw materials
- Quarantine materials pending release

7.2 In-Process Testing

- Define critical control points
- Conduct in-process testing per procedures
- Document results and take action on failures
- Use statistical process control where appropriate

7.3 Finished Product Testing

- Test finished products per release specifications
- Conduct appearance, identity, and quality tests
- Verify packaging and labeling
- Release products only after all testing passes

7.4 Retain Samples

- Retain samples from each production batch
- Store under appropriate conditions
- Retain for product shelf life plus one year minimum
- Use for stability monitoring and investigations

8. OUT-OF-SPECIFICATION RESULTS

8.1 Investigation Process

- Initiate investigation for all OOS results
- Assess for laboratory error first
- Investigate manufacturing process if lab error ruled out
- Document investigation thoroughly
- Determine root cause

8.2 Decision Making

- Quality Assurance makes final disposition decisions
- Do not release product until investigation complete
- Reject product if OOS confirmed
- Implement corrective actions

9. VALIDATION

9.1 Process Validation

- Validate manufacturing processes before commercial production
- Document validation protocols and reports
- Revalidate when significant changes occur
- Monitor process performance ongoing

9.2 Method Validation

- Validate analytical methods before use
- Demonstrate accuracy, precision, specificity, and robustness
- Transfer methods with appropriate verification
- Revalidate when methods change

9.3 Equipment Qualification

- Qualify equipment before use (IQ, OQ, PQ)
- Calibrate instruments per schedules

- Maintain equipment in qualified state
- Requalify after major repairs or moves

10. CONTINUOUS IMPROVEMENT

- Track quality metrics and trends
- Conduct regular quality reviews
- Implement corrective and preventive actions (CAPA)
- Benchmark against industry standards
- Invest in quality improvement initiatives

11. ROLES AND RESPONSIBILITIES

11.1 Quality Assurance

- Establish testing requirements and standards
- Review and approve test protocols and reports
- Make product release decisions
- Manage quality systems and documentation

11.2 Product Development

- Design products meeting quality requirements
- Conduct development testing
- Transfer products to manufacturing with validated processes

11.3 Manufacturing/Operations

- Execute testing per procedures
- Maintain equipment and facilities
- Report quality issues promptly

12. RELATED POLICIES

This policy should be read in conjunction with:

- TMG-SEC-002: Product Safety and Quality Control Policy

- TMG-SEC-005: Records Management and Document Retention Policy
- TMG-SEC-011: Supply Chain Management and Risk Mitigation Policy
- TMG-SEC-038: AI Ethics and Responsible AI Use Policy
- TMG-SEC-041: Software and Systems Development Standards

13. POLICY REVIEW

This policy shall be:

- Reviewed annually by Quality Assurance leadership
- Updated to reflect regulatory and industry changes
- Approved by the VP of Quality Assurance
- Communicated to all relevant personnel

14. DEFINITIONS

- **Validation:** Documented evidence that a process consistently produces results meeting specifications.
- **Qualification:** Documented evidence that equipment or systems are properly installed and operate correctly.
- **OOS:** Out-of-Specification - test result falling outside acceptance criteria.
- **CAPA:** Corrective and Preventive Action.
- **CoA:** Certificate of Analysis - document certifying test results.

For questions about this policy, contact:
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