

AQL Inspection Standard Cheat Sheet for Importers

Introduction: Speaking the Language of Quality

How do you know if 1,000 units are good enough if you can't check every single one? This is where the **Acceptable Quality Limit (AQL)** comes in. AQL is an internationally recognized sampling procedure used in quality control inspections to determine if a batch of products meets pre-defined quality standards. It provides a statistical and objective method for accepting or rejecting a production batch. This cheat sheet demystifies AQL for importers.

Part 1: The Core Concepts of AQL

What is a Sampling Plan? Instead of checking 100% of the order, an inspector randomly selects a sample size from the total batch. The sample size is determined by the batch size and the chosen AQL level.

What is AQL? The AQL is the **worst tolerable** percentage of defective items (or number of defects) in a batch that you are willing to accept. It is a threshold, not a goal. An AQL of 1.0 does not mean you expect 1% defects; it means you will reject the batch if defects exceed 1%.

Critical, Major, and Minor Defects: Defects are not created equal. AQL allows you to set different tolerance levels for different severity of defects:

Critical Defects: Defects that render the product unsafe or unusable (e.g., faulty wiring on an electrical item). AQL for these is always very strict, typically 0 or 0.10.

Major Defects: Defects that may cause the product to fail or reduce its usability, value, or safety (e.g., a broken zipper, wrong color). Common AQL for majors is 1.5 or 2.5.

Minor Defects: Defects that do not reduce the product's usability but are noticeable and deviate from specifications (e.g., a minor scratch, slight color variation). Common AQL for minors is 4.0 or 6.5.

Part 2: How to Use an AQL Table (A Practical Example)

Imagine you have an order of **5,000 shirts**.

You define your quality standards as:

Critical Defects: AQL 0.0 (Zero tolerance)

Major Defects: AQL 2.5

Minor Defects: AQL 4.0

1. Find Sample Size: Based on the batch size (5,000 units), the AQL standard table directs the inspector to pull a random sample of **200 shirts** from the entire order.

2. Determine Acceptance Number: The table shows that for a sample size of 200 and an AQL of 2.5 for Major defects, the "Acceptance Number" is **10**. This means you can accept up to 10 major defects in the sample.

3.The Verdict:

If the inspector finds **10 or fewer** major defects, the batch **PASSES** for major defects.

If they find **11 or more** major defects, the batch **FAILS**.

This process is repeated for Critical and Minor defects using their respective AQLs. The batch fails overall if it fails any of the three defect categories.

Part 3: Creating Your Inspection Checklist

An AQL inspection is meaningless without a clear checklist that defines what constitutes a defect. Your checklist should be part of your purchase order and include:

Product Specifications: Materials, dimensions, weight, color.

Functionality: Does it work as intended?

Packaging & Labeling: Correct cartons, polybags, logos, and shipping marks.

Workmanship: Stitching, seams, glue, surface finishes.

On-site Tests: Drop tests, functionality tests.

Conclusion: AQL is Your Objective Benchmark

AQL removes emotion and subjectivity from quality control. It provides a fair, statistical method for both you and the supplier to judge the order. By

understanding and specifying AQL levels in your contract, you move from saying "the quality doesn't look good" to stating "the inspection failed as major defects exceeded the AQL 2.5 threshold." This professional approach saves time, money, and relationships. For best results, always hire a third-party inspector to conduct the check impartially.