

# SOP: Item Labeling and Barcoding Procedures

This SOP details **item labeling and barcoding procedures**, covering standardized labeling formats, barcode generation and printing, label application techniques, quality control measures, inventory tracking integration, and compliance with industry regulations. The goal is to ensure accurate product identification, efficient inventory management, and seamless traceability throughout the supply chain.

## 1. Purpose

To establish standardized processes for item labeling and barcoding to ensure accuracy, traceability, and regulatory compliance in the management of inventory and supply chain operations.

## 2. Scope

This SOP applies to all personnel responsible for labeling and barcoding of products and materials within the organization, from receiving through storage, production, and dispatch.

## 3. Responsibilities

- Warehouse/Inventory Staff:** Apply labels and barcodes, verify accuracy, and report issues.
- Quality Assurance:** Conduct quality checks on labels/barcodes and resolve discrepancies.
- Supervisors/Managers:** Ensure compliance with SOP and schedule training.
- IT/System Administrators:** Maintain inventory tracking integration and barcode generation systems.

## 4. Procedure

### 4.1 Standardized Labeling Formats

- All labels must include: product name, SKU or item code, quantity, batch/lot number (if applicable), manufacturing/expiry date (if required), and barcode.
- Sample label format:

Field	Example
Product Name	Widget ABC
SKU/Item Code	WGT-12345
Batch/Lot	B230606
Quantity	100
Barcode	(Barcode image or code)

### 4.2 Barcode Generation & Printing

- Enter item details into the inventory/barcoding software.
- Generate unique barcodes (e.g., Code 128, QR, or as per industry requirement).
- Print barcode labels using approved printers and materials resistant to environmental conditions (if required).
- Ensure barcode clarity and readability before application.

### 4.3 Label Application Techniques

- Clean and dry the surface before applying the label.

- Position the label on a flat, visible part of the item or packaging.
- Press firmly to adhere and eliminate air bubbles.
- If relabeling, remove or void previous labels to prevent confusion.

#### **4.4 Quality Control Measures**

- Randomly inspect labeled products for accuracy and proper adhesion.
- Verify that barcode scans correctly and links to the appropriate item record.
- Document and rectify any labeling or barcoding errors immediately.

#### **4.5 Inventory Tracking Integration**

- Ensure each barcode is uniquely linked to the item in the inventory management system.
- Update system records upon labeling and during all inventory movements.
- Regularly back up inventory data to prevent information loss.

#### **4.6 Compliance with Industry Regulations**

- Follow all relevant standards (e.g., ISO/GS1 for barcodes, FDA/USDA/other statutory requirements for regulated industries).
- Review and update SOP as necessary to reflect regulatory changes.

### **5. Training**

- Staff must complete training on labeling and barcoding procedures before handling stock.
- Refresher courses scheduled at least annually or when process changes occur.

### **6. Records & Documentation**

- Maintain records of labeling activities, quality control checks, and corrective actions taken.
- Keep training logs for all staff involved in barcode and labeling processes.

### **7. References**

- Inventory Management Policy
- GS1 General Specifications (latest edition)
- Applicable regulatory guidelines (e.g., FDA, ISO)