

# Supply Chain Packaging Optimization Checklist

## Material Selection & Sustainability

Assess packaging materials for environmental impact, recyclability, and renewable content.

### Primary Packaging Material?

- ☐ Corrugated Cardboard
- ☐ Plastic (PET, HDPE)
- ☐ Paper
- ☐ Glass
- ☐ Metal

### Percentage of Recycled Content (Minimum)

### Sustainability Certifications Required?

- ☐ FSC (Forest Stewardship Council)
- ☐ SFI (Sustainable Forestry Initiative)
- ☐ Recycled Claim Standard
- ☐ ISCC (International Sustainability and Carbon Certification)

### Packaging Material Source?

- ☐ Domestic
- ☐ International

### Justification for Material Choice

Write something...

### Material Safety Data Sheet (MSDS)

 Upload File

## Size & Weight Reduction

Evaluate opportunities to minimize packaging dimensions and weight to reduce transportation costs and material usage.

### Current Package Weight (kg)

Enter a number...

### Target Package Weight Reduction (kg)

Enter a number...

### Current Package Dimensions (Length x Width x Height in cm)

Enter a number...

### Target Package Volume Reduction (cm<sup>3</sup>)

Enter a number...

### Material Reduction Strategy

- ☐ Thinning Material
- ☐ Downsizing Overall
- ☐ Using Lightweight Alternatives
- ☐ Combination

### Details on Size & Weight Reduction Initiatives

Write something...

## Protective Performance

Confirm adequate protection against damage during handling and transit through drop, vibration, and compression testing.

### Drop Test Height (inches)

Enter a number...

### Vibration Test Frequency (Hz)

Enter a number...

### Compression Test Load (lbs)

Enter a number...

### Drop Test Orientation(s)

- ☐ Top
- ☐ Bottom
- ☐ Side
- ☐ Corner

### Pass/Fail Criteria

- ☐ No visible damage
- ☐ Minimal cosmetic damage
- ☐ Product functionality maintained

### Damage Observations (if applicable)

Write something...

### Test Photo/Video (if applicable)

 Upload File

## Compliance & Regulations

Verify compliance with relevant packaging regulations (e.g., weight limits, material restrictions, labeling requirements).

### Applicable Regulations (e.g., ISPM 15, UN Packaging)

- ☐ ISPM 15
- ☐ UN Packaging Standards
- ☐ REACH
- ☐ RoHS
- ☐ Food Contact Regulations
- ☐ Other - Specify in LONG\_TEXT

### Specify 'Other' Regulation (if selected)

Write something...

### Maximum Gross Weight (kg/lbs)

Enter a number...

### Maximum Dimensions (Length x Width x Height - cm/in)

Enter a number...


### Country-Specific Requirements (if applicable)

- ☐ Yes - Specify in LONG\_TEXT
- ☐ No

### Specify Country-Specific Requirements (if applicable)

Write something...

**Supporting Documentation (e.g., certificates, permits)**

 Upload File

## Cost Analysis & ROI

Calculate the total cost of packaging, including materials, labor, and disposal, and assess the return on investment of optimization efforts.

**Current Packaging Material Cost per Unit**

Enter a number...

**Proposed Packaging Material Cost per Unit**

Enter a number...

**Current Labor Cost per Unit (Packaging)**

Enter a number...

**Proposed Labor Cost per Unit (Packaging)**

Enter a number...

**Current Transportation Cost per Unit (Affected by Packaging)**

Enter a number...

### Proposed Transportation Cost per Unit (Affected by Packaging)

Enter a number...

### Estimated Annual Volume of Units Packaged

Enter a number...

### Estimated Implementation Cost (New Packaging/Equipment)

Enter a number...

### Estimated Payback Period (in months)

Enter a number...

## Design for Automation

Evaluate packaging design to ensure compatibility with automated packaging and fulfillment processes.

### Packaging Type Compatibility

- ☐ Flow-wrap machines
- ☐ Case erectors
- ☐ Tray formers
- ☐ Label applicators
- ☐ Carton sealers

### Maximum Case Weight (lbs)

Enter a number...

### Maximum Product Dimensions (inches - Length)

Enter a number...

### Maximum Product Dimensions (inches - Width)

Enter a number...

### Maximum Product Dimensions (inches - Height)

Enter a number...

### Barcode/QR Code Placement

- ☐ Top
- ☐ Bottom
- ☐ Side

### Specific Automation Machine Notes

Write something...

## Branding & Marketing

Review packaging design to ensure alignment with brand guidelines and marketing objectives.



### **Describe brand messaging to be reflected in packaging**

Write something...

### **Upload approved brand logo files (vector format)**

 Upload File

### **Select desired packaging color palette (align with brand guidelines)**

- ☐ Primary Brand Color
- ☐ Secondary Brand Color
- ☐ Neutral Accent Color

### **Font family to be used on packaging (consistent with brand)**

Write something...

### **Notes regarding imagery or graphics to be used**

Write something...

## **Supplier Collaboration**

Assess and improve collaboration with packaging suppliers for innovation and cost savings.

### Current Communication Methods

Write something...

### Joint Improvement Initiatives

- ☐ Cost Reduction
- ☐ Sustainability
- ☐ Quality
- ☐ Lead Time Reduction
- ☐ Innovation

### Frequency of Supplier Meetings (per month)

Enter a number...

### Last Joint Innovation Workshop Date

Enter date...

### Supplier Feedback Mechanism

- ☐ Formal Surveys
- ☐ Regular Meetings
- ☐ Informal Communication
- ☐ Dedicated Portal

### Supplier Collaboration Agreement (if applicable)

 Upload File

# Transportation Optimization

Analyze the impact of packaging changes on transportation efficiency (e.g., pallet utilization, cube optimization).

## Average Pallet Utilization (%)

Enter a number...

## Cube Utilization Rate (m³)

Enter a number...

## Primary Transportation Mode

- ☐ Truckload (TL)
- ☐ Less-than-Truckload (LTL)
- ☐ Rail
- ☐ Air
- ☐ Ocean

## Transportation Optimization Strategies Implemented

- ☐ Route Optimization Software
- ☐ Consolidation of Shipments
- ☐ Negotiated Rates with Carriers
- ☐ Mode Shift
- ☐ Backhauling

## Average Transit Time (Days)

Enter a number...

### Details on Carrier Negotiation Results

Write something...

## End-of-Life Management

Plan for proper disposal or reuse of packaging materials, including recycling, composting, or return programs.

### Primary Disposal Method

- ☐ Recycling
- ☐ Composting
- ☐ Landfill
- ☐ Reuse/Refill
- ☐ Other

### Materials Recycled/Composted

- ☐ Corrugated Cardboard
- ☐ Plastic Film
- ☐ Paper
- ☐ Metal
- ☐ Wood
- ☐ Other

### Estimated Recycling Rate (%)

Enter a number...

**Last Packaging Waste Audit Date**

Enter date...

**Details of Return/Refill Program (if applicable)**

Write something...

**Documentation of Recycling/Composting Agreements**

 Upload File

**Supplier Responsibility for End-of-Life**

- ☐ Supplier Responsible
- ☐ Customer Responsible
- ☐ Shared Responsibility