✅ ChecklistGuro

Plastics Manufacturing BOM Resin Quality Checklist

Resin Identification & Specifications

Verification of resin type, grade, and compliance with defined specifications.

Resin Type

☐ Polyethylene (PE)

☐ Polypropylene (PP)

☐ Polyvinyl Chloride (PVC)

☐ Polystyrene (PS)

☐ PET (Polyethylene Terephthalate)

☐ Other

Resin Grade

Molecular Weight (Avg)

Enter a number...

Density (g/cm³)

Enter a number...

Specification Sheet Reference

Write something...

Specification Sheet

⬆ Upload File

Filler Type (if applicable)

☐ None
☐ Calcium Carbonate
☐ Talc
☐ Clay

Certificate of Analysis (CoA) Review

Assessment of CoA data, including properties and testing results.

Lot Number

Enter a number...

Molecular Weight (Avg)

Enter a number...

Viscosity (cP)

Enter a number...

Density (g/cm³)

Enter a number...

Moisture Content (%)

Enter a number...

CoA Verified?

☐ Yes

☐ No

Comments/Observations

Write something...

Physical Property Testing

Confirmation of key physical properties (e.g., density, viscosity, melt flow index).

Density (g/cm³)

Enter a number...

Viscosity (Pa·s)

Enter a number...

Melt Flow Index (g/10min)

Enter a number...

Moisture Content (%)

Enter a number...

Particle Size (μm)

Enter a number...

Measurement Method

☐ ASTM
☐ ISO
☐ Company Standard

Measurement Date

Enter date...

Chemical Property Testing

Evaluation of chemical characteristics (e.g., purity, moisture content).

Moisture Content (%)

Enter a number...

Volatile Organic Compounds (VOCs) Content (%)

Enter a number...

Ash Content (%)

Enter a number...

Acidity (meq/g)

Enter a number...

Gas Chromatography - Mass Spectrometry (GC-MS) Report

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Test Method Used (e.g., ASTM, ISO)

☐ ASTM
☐ ISO
☐ Internal Method

Color & Clarity

Visual inspection and measurement of color and clarity metrics.

Yellowness Index (YI)

Enter a number...

Haze Percentage

Enter a number...

Color Consistency (Visual)

☐ Excellent

☐ Good

☐ Fair

☐ Poor

Detailed Color Description (if applicable)

Write something...

Color Sample Photo (for reference)

⬆ Upload File

Transparency Rating

☐ Opaque

☐ Translucent

☐ Transparent

Batch Traceability & Documentation

Verification of batch numbers, lot records, and related documentation.

Batch Number

Enter a number...

Date Received

Enter date...

Supplier Comments (if any)

Write something...

Document Status

☐ Approved

☐ Pending Review

☐ Rejected

CoA Document

⬆ Upload File

Lot Origin Information

Write something...

Supplier Quality Assurance

Assessment of supplier certifications and quality management systems.

Supplier Certification Status

☐ ISO 9001 Certified

☐ IATF 16949 Certified

☐ Other (Specify)

Supplier Audit Frequency

Write something...

Last Audit Score

Enter a number...

Date of Last Audit

Enter date...

Audit Findings Summary

Write something...

Audit Report (PDF)

⬆ Upload File

Supplier Performance Rating

☐ Excellent

☐ Good

☐ Average

☐ Needs Improvement

Storage Conditions

Confirmation of proper storage environment to maintain resin quality.

Storage Temperature (°C)

Enter a number...

Relative Humidity (%)

Enter a number...

Storage Container Type

☐ Original Packaging

☐ Resealable Drum

☐ Dedicated Storage Bin

Date Resin Received

Enter date...

Comments on Storage Conditions

Write something...

Sunlight Exposure

☐ Protected

☐ Limited

☐ Direct

Non-Conformance Reporting

Procedure for identifying, documenting, and resolving any deviations from specifications.

Description of Non-Conformance

Write something...

Quantity Affected (Units)

Enter a number...

Severity Level

☐ Minor

☐ Moderate

☐ Major

☐ Critical

Date of Non-Conformance Identified

Enter date...

Time of Non-Conformance Identified

Root Cause Determination Status

☐ Not Started

☐ In Progress

☐ Completed

Root Cause Analysis Notes (if applicable)

Write something...

Supporting Documentation (Photos, CoA Discrepancies)

⬆ Upload File

Corrective Action Verification

Ensuring implemented corrective actions are effective and prevent recurrence.

Date of Corrective Action Implementation

Enter date...

Number of Batches Affected

Enter a number...

Detailed Description of Corrective Action Taken

Write something...

Root Cause Analysis Completed?

- [ ] Yes
- [ ] No
- [ ] Pending

Summary of Root Cause Findings

Write something...

Effectiveness of Corrective Action?

- [ ] Fully Effective
- [ ] Partially Effective
- [ ] Not Effective

Justification for Effectiveness Assessment

Write something...

Follow-Up Review Date

Enter date...