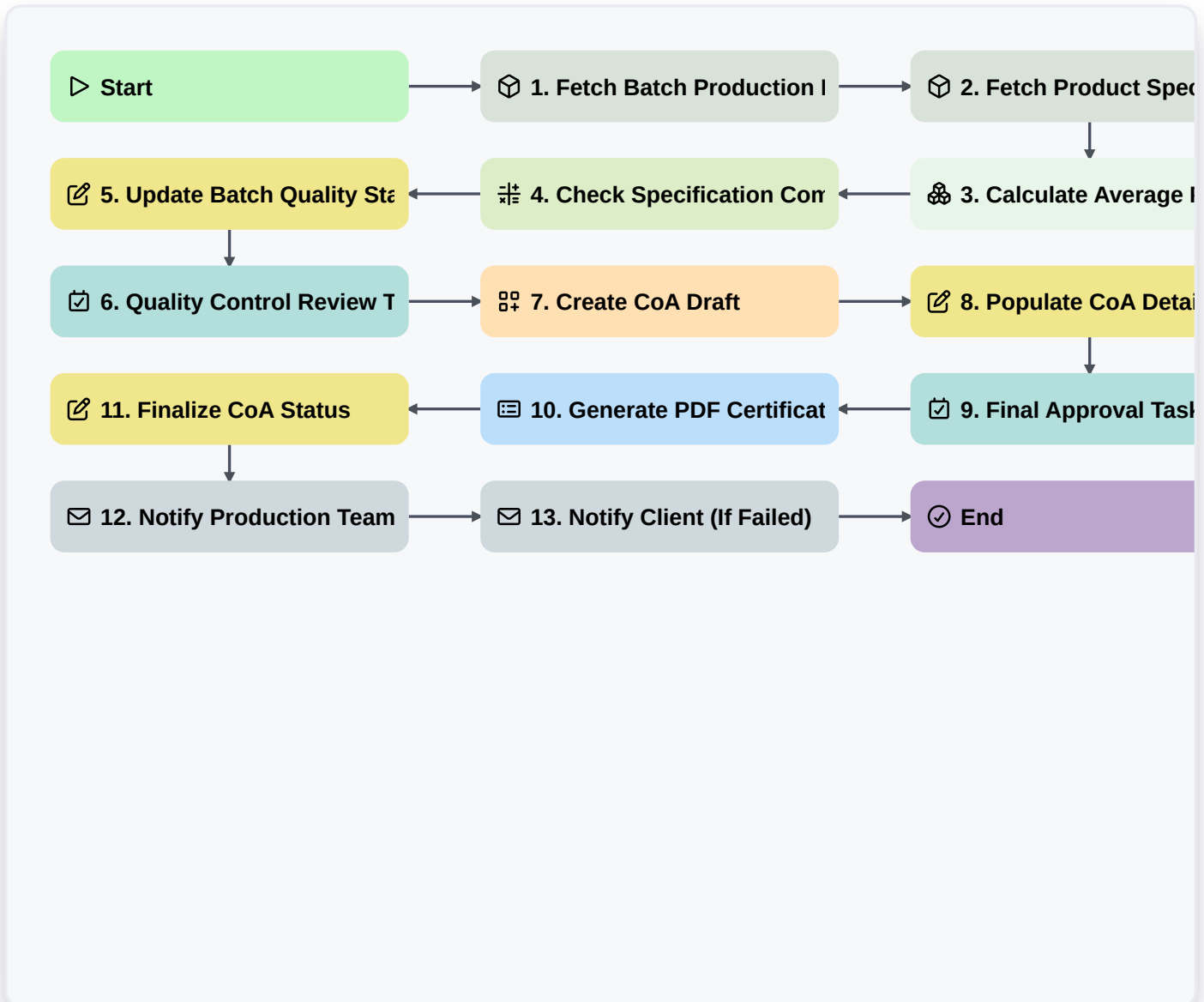


Certificate Of Analysis (CoA) Generation Process



▶ Start

Start of the Workflow/Process.

📦 1. Fetch Batch Production Data

Retrieve all raw material test results and production parameters from the Batch Data Model.

📦 2. Fetch Product Specifications

Retrieve the predefined acceptance criteria (min/max limits) for the specific product SKU.

🔗 3. Calculate Average Purity

Calculate the average purity percentage from all sampled test entries in the batch.

⚖️ 4. Check Specification Compliance

Compare the aggregated test results against the product specification limits to determine pass/fail status.

📝 5. Update Batch Quality Status

Update the 'Quality Status' field in the Batch Data Model to 'Review Pending' or 'Passed/Failed'.



✔ **6. Quality Control Review Task**

Create a task for the QC Manager to review the calculated results and verify laboratory findings.

☰ **7. Create CoA Draft**

Generate a new entry in the Certificate of Analysis Data Model populated with the processed data.

✍ **8. Populate CoA Details**

Write the specific test values, dates, and technician names into the newly created CoA entry.

✔ **9. Final Approval Task**

Create a task for the Quality Assurance Lead to digitally sign and approve the CoA.

☰ **10. Generate PDF Certificate**

Generate the formal, printable PDF document representing the Certificate of Analysis based on the CoA entry data.

✍ **11. Finalize CoA Status**

Update the CoA entry status to 'Released' or 'Archived'.

✉ **12. Notify Production Team**

Send an email to the Production Manager with the link to the completed CoA.

✉ **13. Notify Client (If Failed)**

Send an automated email to the client contact if the specification compliance calculation resulted in a 'Fail'.

✔ **End**

End of the Workflow/Process.