A repeatable indigo record

Use one setup sheet for each vat and one cycle sheet for each sample. Keep the recipe or kit instructions beside this log.

01 / Name your dye and process

Record whether the dye is plant-derived or synthesized, the supplier, and the vat system. Natural indigo and pre-reduced products need their own preparation instructions. A blue sample cannot establish dye origin.

02 / Connect every observation to a sample

Give each swatch an ID before dyeing. Record its fiber, preparation, and resist method. Follow that same piece through dipping, exposure to air, rinsing, washing, and drying.

03 / Record each cycle separately

Immersion is when reduced indigo, the form that dissolves in the vat, reaches the cloth. After lifting, oxygen in the air changes the dye to its blue, insoluble form. This is oxidation. In the Jacquard pre-reduced indigo kit, for example, cloth may come out yellow-green and turn blue in air before the next dip.

Jacquard Indigo Tie Dye Kit instructions, Dyeing steps 5-8

Record immersion and air exposure separately for each cycle. A single total hides how much time the cloth spent taking up dye and how much time it spent oxidizing before the next dip. Use the timing and finishing instructions for your own vat system. The kit example describes that product, and the worksheet can accommodate any cycle count. Add a visible observation and photo ID for each cycle.

04 / Compare finished, dry cloth

Place samples flat on the same neutral background in consistent light. Compare the center of each swatch, away from folds and overlapping edges. Record the final wash and dry state alongside the photo ID.

05 / Decide what to test next

Write the visible result first. Then choose one variable to investigate, such as the number of cycles. Keep other conditions as similar as practical and record any differences.

Use the protective equipment, ventilation, handling, and disposal directions supplied for your dye system. Record measured pH or temperature only when your method calls for them.

Vat setup

Complete the actual quantities and units from your chosen formulation. Keep additions and replenishment in a dated record.

Date / maker / vat ID

Dye source, supplier, batch / plant-derived or synthesized

Vat system / recipe or kit name / instruction link and version

Water volume and unit / preparation date

Ingredient or addition	Actual amount + unit	Time added

Measured conditions, if required / instrument and units

Fiber / dry fabric weight / scouring or prewash / prewetting

Dipping & swatch log

Sample ID _____ Vat ID _____ Date _____

Resist method / folds / bindings _____

Cycle	Immersion	Air exposure	Visible observation
1			
2			
3			
4			
5			

Finishing sequence / rinse, wash, and drying completed

Final dry appearance / photo ID / light and background

Attach a dry swatch here

Next comparison

Variable to change _____

Keep consistent _____

Question to answer _____

A dry-swatch comparison

These hypothetical entries illustrate documentation. They are not measured results or recommended timings.

Shared setup

Cut S-01 and S-02 from the same piece of prewashed plain cotton. Use equal sizes, the same prewetting, no resist, and the same vat V-01 in one session. Use the same immersion and air-exposure procedure for each cycle and log the actual times separately. Finish both with the same rinse, wash, and drying procedure.

One change

S-01 completes one dip-and-air cycle. S-02 completes two. For the shared first cycle, the record notes that each marked corner looks greenish at lifting and blue after air exposure. On its second lift, S-02 has a greenish cast at the same corner and darkens to blue during air exposure. Cycle count is the comparison variable.

Dry comparison

Lay both fully dry swatches flat on the same pale gray background in even light. In this hypothetical result, the center of S-01 is a muted medium blue and the center of S-02 is a deeper blue. Neither center shows obvious patchiness. Photo V01-DRY-01 shows both samples side by side, with their IDs.

Interpretation

The second cycle is associated with a deeper dry blue in this example under the recorded conditions. Repeat the pair before relying on the difference. The result does not predict the shade another vat, fiber, or finishing method will produce.

Reuse

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