

The Formulator's Field Guide

A complete walkthrough of the Recipe Studio, the compliance engine, batch tracking, and every tool built to take a formula from idea to shelf.

Platform User Guide · www.loovay.app

Contents

Copyright & Distribution Notice3

Welcome to Loovay4

1. The Recipe Studio & Formulation Engine5
2. The Math Under the Hood: Dual-Lye Stoichiometry9
3. Fluid & Solvent Calculation Modes11
4. The AI Alchemist & AURA Mentor12
5. Compliance & Regulatory Guard16
6. The Manufacturing Method Generator21
7. The Master Ingredient Library24
8. Financials & COGS Engine26
9. Batch Log, Curing & Lot Traceability29
10. The Adaptive Scale-Up Assistant35
11. The Ad Copy Engine & Ad Library37
12. Performance Analytics & Workspace Settings39
13. Loovay Circle: Community & Peer Support40

Quick Reference44

Copyright & Distribution Notice

© 2026 Loovay. All rights reserved.

This guide, including its text, diagrams, screenshots, and layout, is the property of Loovay and is protected under applicable copyright law. No part of this document may be reproduced, copied, distributed, posted online, or transmitted in any form or by any means — electronic, mechanical, photocopying, recording, or otherwise — without the prior written permission of Loovay, except for brief excerpts used in reviews or internal training with attribution.

This document is provided for the use of Loovay account holders and authorized personnel only. It is not licensed for resale, redistribution, or publication, in whole or in part, on any external website, forum, marketplace, or competing product.

“Loovay” and its associated logos are trademarks of Loovay. All other product names, logos, and brands referenced are the property of their respective owners and are used for identification purposes only.

The formulation guidance, calculations, and regulatory information in this guide are provided for informational purposes only and do not constitute professional chemical, medical, or legal advice. See the disclaimers referenced throughout this guide for details.

Unauthorized distribution

If you received this guide outside an authorized Loovay account, please contact hello@loovay.app. Sharing your copy — internally or externally — outside the terms of your license agreement is a breach of that agreement and of applicable copyright law.

Document version 1.0 — issued September 2026. This notice applies to every page of this guide regardless of format (digital, printed, or converted).

Welcome to Loovay

Loovay is the workspace built for cosmetic formulators at any stage — the person mixing their first batch on a kitchen counter, the one turning a hobby into a small business, and the one running full production for an established brand. Whatever stage you're at, this is for anyone who mixes, weighs, and cures their own formulas, and who used to track it all across a notebook, a spreadsheet, three browser tabs, and a gut feeling.

This guide walks through every part of the platform in the order you'll actually touch it: building a recipe, checking the chemistry, generating compliant labels, tracking a batch through the cure rack, pricing it, marketing it, and talking to other formulators when something goes sideways on the bench.

Each chapter opens with the problem it solves, then walks through the screens step by step. Read it start to finish once, and keep it as a reference after that — you'll find yourself back in the compliance and financials chapters more than any other, whether you're formulating for the first time or the five-hundredth.

How the workspace is laid out

Everything lives behind one left-hand sidebar: Recipe Catalog, Add Recipe, Ingredient Library, Batch Log, Financials & COGS, Ad Copy Engine, Ad Library, Analytics, Settings, Billing & Plan, and Community Circle. Most of your time will be spent inside a single recipe — the Recipe Studio — where the formulation engine, compliance guard, AI mentor, method generator, and cost engine all sit on the same page, reacting to each other in real time.

Before you start

Every calculation in the studio is a theoretical estimate built from published SAP values and standard references. Bench testing, pH verification, and micro-testing before market are still on you — the engine gets you to a safe, well-reasoned starting point fast, not a shortcut around testing.

The Recipe Studio & Formulation Engine

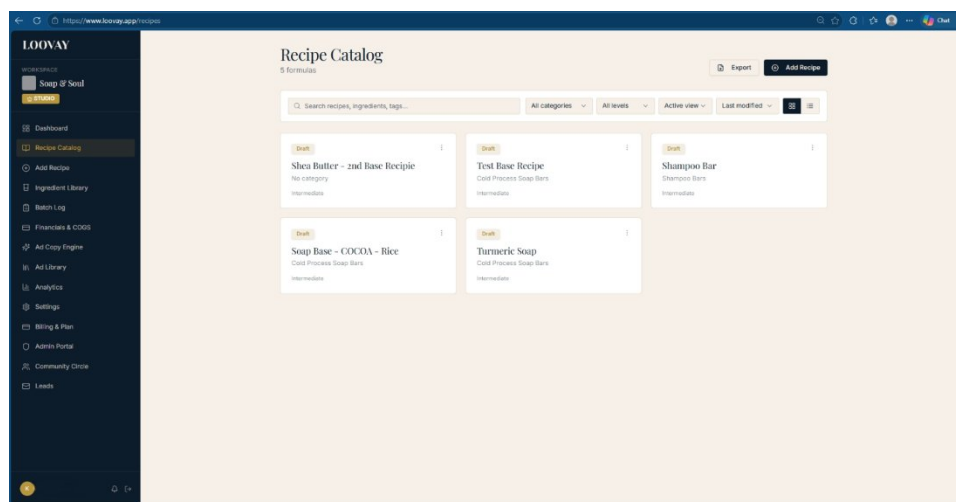
“My studio notes are a chaotic mess scattered across phone apps, notebooks, and loose paper. When a batch turns out amazing, I can never remember the exact tweak that made it happen.”

What Loovay does about it

The Recipe Catalog and the Formulation Engine put every recipe, revision, and tweak in one place, and do the lye math for you as you build.

The Recipe Catalog

Open Recipe Catalog from the sidebar to see your whole formula library as cards — draft or production-ready, tagged by category and difficulty. Search by recipe name, ingredient, or tag; filter by category, skill level, or last-modified date; switch between grid and list view depending on whether you're browsing or hunting for one specific formula.



The Recipe Catalog: every formula as a card, filterable by category, level, and status.

Click + Add Recipe to open a blank formulation canvas. Give it a title, a product category, a target batch size, and a difficulty rating, then start logging ingredients and exact percentages. New formulas sit under a Draft badge until you're confident enough to mark them production-ready — so half-finished experiments never get mixed up with your real inventory recipes.

- Export your whole catalog for an offline backup or a print sheet for the studio table.
- Use the card's $\vdots$ menu to duplicate a recipe before testing a variation, instead of editing your working version.

Setting your batch size and oils

Inside a recipe, set Total Batch Oil Weight and pick your unit — grams, kilograms, ounces, or pounds. Add each oil, butter, or fat with its percentage of the total; the engine converts that instantly into a gram weight and keeps every downstream number (lye, water, yield) tied to it. Change the total batch weight later — scaling from a 300 g bench sample up to a 5 kg production run — and every ingredient mass updates automatically while the percentages stay exactly the same.

NAME	PRICE	WEIGHT	%	TEMP	COST	UNIT
Shea Butter	\$120.00	80.0000	10.1	1	1.5	\$120.00
Coconut Oil 76	\$175.0000	9	25.1	1	1.6	\$175.00
Olive Oil	\$304.5000	9	35.1	1	5	\$304.50
Rice Bran Oil (Refined)	\$174.0000	9	23.1	1	8	\$174.00
Avocado Oil	\$43.5000	9	5.0	1	1.2	\$43.50

The Edit Recipe screen: basics, total batch weight, and the ingredient table with mass, %, and cost per unit.

The Saponification Engine

This is the mathematical core of the studio. It takes your lipid masses and works out exactly how much alkali is needed to turn them into soap, for cold process, hot process, liquid, or dual-lye formulas — while a live product mockup and a full fatty-acid readout update alongside it.

Superfat %: 5.5
Dual-Lye Split - NaOH / KOH: 100% / 0%
NaOH purity %: 100.0
Water Calculation Mode: Water / Lye Ratio
Water / Lye Ratio: 2

Required NaOH: 157.76 g
Water Mass: 235.91 g
Total Batch Yield: 122.3 g

Hardness: 36
Conditioning: 60
Creamy Lather: 24
Bubble Lather: 23
Bubble Value: 64

The Saponification Engine panel: superfat, dual-lye split, purity, and water mode, with results on the right.

Choosing your alkali

- Pure NaOH (sodium hydroxide) — the standard choice for solid bar soap.
- Pure KOH (potassium hydroxide) — used for liquid soap, with a purity slider (typically 85–95%) so the math matches your actual raw material, not an assumed 100%.
- Dual-lye blends — a custom NaOH/KOH split (say, 90/10) for cream soaps or bars with extra lather acceleration.

Formulator tip

When you're formulating liquid soap with KOH, set the purity slider to match your supplier's Certificate of Analysis exactly — 88.5%, not a rounded 90%. Calculate at full purity and your finished liquid soap will cloud with un-saponified oil and start separating.

Superfat and lye discount

Superfat is the percentage of oil left deliberately unreacted, and it swings from -10% to +30%:

- -10% to -1% (lye-heavy): high cleansing, built for laundry bars and heavy degreasers.
- 0% to +5% (standard): a balanced, stable bar with full lipid conversion.
- +6% to +30% (high-conditioning): unreacted oil left in the bar for a noticeably richer, more moisturizing finish — facial bars, body balms.

Water and liquid replacements

Set hydration either as a Water:Lye ratio (roughly 1.5:1 to 3:1) or as a percentage of oil weight (33–38% is typical). The engine auto-calculates a sodium phytate chelator dose (0.05–0.2%) for hard-water areas, which keeps orange spots and rancidity off your cured bars. You can also split the liquid phase across non-water bases — goat milk, coconut milk, aloe vera, floral hydrosols — and the engine accounts for the natural sugars in those, which heat batches faster and change your working time at trace.

Fatty acid profiling and the physical property scorecard

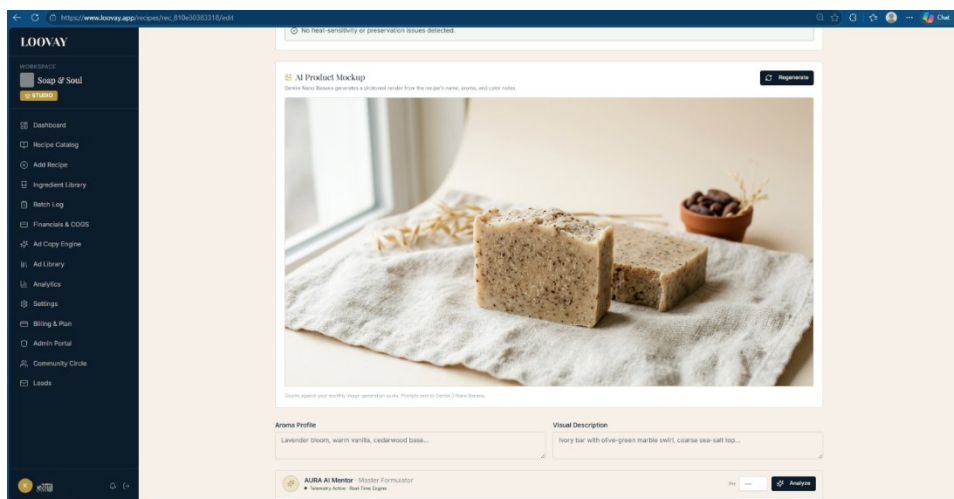
As you build, the engine tracks eight fatty acids across your oil blend — lauric, myristic, palmitic, stearic, ricinoleic, oleic, linoleic, and linolenic — and translates that into seven physical-property scores, each checked against an established target range.

Property	What it's built from	Target range	What high values mean
Hardness	Lauric + Myristic + Palmitic + Stearic	29 – 54	Long-lasting, firm bar; won't slough
Cleansing	Lauric + Myristic	12 – 22	Deep stripping power; drying above 22
Conditioning	Oleic + Linoleic + Linolenic + Ricinoleic	44 – 69	Soothing, moisturizing, softer bar

Property	What it's built from	Target range	What high values mean
Bubbly lather	Lauric + Myristic + Ricinoleic	14 – 46	Fast, big flash foam
Creamy lather	Palmitic + Stearic + Ricinoleic	16 – 48	Dense, stable, lotion-like foam
Iodine value	Unsaturation index (g I ₂ /100g)	41 – 70	Above 70 risks a soft bar and rancidity
INS score	SAP value – Iodine value	136 – 165	Overall bar-balance benchmark

The product mockup

As you adjust oils, botanicals, colorants, and packaging format, the engine renders a live, photorealistic mockup of the finished product — color and opacity derived from oil hue and any clay or mica added, texture and sheen predicted from wax content and fatty acid hardness, and the container automatically matched to product type: a molded bar, an amber bottle, or a cream jar.



The Product Mockup Engine rendering color, texture, and packaging in real time as the formula changes.

Building a balanced recipe, step by step

- Open the Formulation Engine workspace and add your base oils with target percentages (e.g. 40% olive, 30% coconut, 20% palm, 10% castor).
- Enter your total target oil weight.
- Choose your alkali type (NaOH, KOH, or a dual-lye split) and set purity to match your supplier's COA.
- Set your target superfat.
- Pick a water:lye ratio and, if you're using milk or juice, split the liquid phase accordingly.

- Check the fatty acid scorecard — if cleansing reads above 22, pull back coconut oil and add more olive.
- Confirm iodine stays under 70 for shelf stability, then preview the mockup before you stage the batch.

The Math Under the Hood: Dual-Lye Stoichiometry

“Calculating lye ratios and water discounts across changing batch sizes gives me constant anxiety. One wrong decimal point and a whole batch goes into the trash — or worse, burns someone's skin.”

What Loovay does about it

The stoichiometry engine runs the exact molecular math behind every lye calculation, so a typo in a spreadsheet cell can't turn into a caustic batch.

Sodium hydroxide (NaOH, molar mass ≈ 39.997 g/mol) and potassium hydroxide (KOH, molar mass ≈ 56.105 g/mol) don't saponify oil in the same proportions, because they don't weigh the same per mole. Any dual-lye recipe has to correct for that difference, and the engine does it in four steps.

Step 1 — Baseline pure NaOH requirement

For every lipid in the recipe, multiply its mass by its NaOH SAP value, then add them all together. That total is the 100%-pure NaOH the recipe would need at zero superfat.

Step 2 — Apply the superfat discount

Multiply that baseline by $(1 - \text{superfat})$, where superfat is written as a decimal. A 5% superfat becomes 0.05.

Step 3 — Split across NaOH and KOH

Multiply the discounted total by your NaOH ratio to get the pure NaOH portion. For the KOH portion, multiply by the KOH ratio, then by the molar-mass conversion constant — $56.105 \div 39.997$, which comes out to roughly 1.40275 — because it takes more KOH by weight to do the same job.

Step 4 — Correct for raw material purity

Industrial NaOH commonly tests at 98% purity; technical-grade KOH pellets typically run 85–90%, carrying trace moisture and carbonates. Divide each pure-alkali target by its actual purity (as a decimal) to get the real number to put on the scale.

Formulator tip

Always enter your exact KOH purity from the supplier's COA — 88.5%, not a rounded 90% or an assumed 100%. Get this wrong and the finished batch comes out under-saponified: soft, greasy, or separated.

Worked example: a dual-lye shaving soap

Batch: 600 g stearic acid, 300 g coconut oil, 100 g castor oil (1000 g total). Target superfat 5%.
 Split: 60% KOH / 40% NaOH. Purities: NaOH 98%, KOH 90%.

Lipid	Mass	SAP (NaOH)	Baseline pure NaOH
Stearic acid	600 g	0.141	84.60 g
Coconut oil	300 g	0.183	54.90 g
Castor oil	100 g	0.129	12.90 g
Total	1000 g	—	152.40 g

— After the 5% superfat discount: $152.40 \text{ g} \times 0.95 = 144.78 \text{ g}$ pure NaOH-equivalent.

— NaOH share (40%): $144.78 \times 0.40 = 57.912 \text{ g}$ pure NaOH.

— KOH share (60%): $(144.78 \times 0.60) \times 1.40275 = 121.854 \text{ g}$ pure KOH.

— Raw NaOH to weigh out: $57.912 \div 0.98 = 59.09 \text{ g}$.

— Raw KOH to weigh out: $121.854 \div 0.90 = 135.39 \text{ g}$.

That's the entire calculation the engine runs the instant you touch the superfat slider or the purity field — recalculated live, every time.

Fluid & Solvent Calculation Modes

Changing your superfat, lye purity, or dual-lye split all shift how much active alkali is in the recipe — and that changes how much water or liquid you need to dissolve it cleanly. Rather than force one convention, the engine gives you three interchangeable ways to set fluid mass, and recalculates all three live whenever an upstream number changes.

Mode 1 — Percent of total oil weight

Fluid mass = total lipid mass × your target percentage. This is the traditional artisan cold-process metric, independent of how much lye is in the recipe. Typical range: 30–38% of oil weight. Best for standard, balanced cold-process recipes.

Mode 2 — Lye concentration percentage

Fluid mass = (total raw lye mass ÷ concentration) – total raw lye mass. This is the industrial-chemistry standard, because reaction speed and heat output depend directly on how concentrated the lye solution actually is. Typical range: 25–50%. Best for advanced swirl work (28–30%), fast mold-release or discounted-water batches (33–38%), and hot process (25–28%).

Mode 3 — Fluid-to-lye ratio

Fluid mass = total raw lye mass × a ratio multiplier. The most intuitive way to stay above the solubility floor — pure NaOH needs at least a 0.9:1 water-to-lye ratio to fully dissolve at room temperature, and the engine flags anything under 1.1:1 as a solubility risk. Typical range: 1.5:1 to 3:1.

Mode	Best for	Main risk
% of oil weight	Simple cold-process soaps at standard superfat	Can run too wet with low-SAP oil blends
Lye concentration %	Multi-color swirls, liquid soap, castile	Concentrations above 40% accelerate trace fast
Fluid-to-lye ratio	Shaving soaps, cream soaps, dual-lye hybrids	Needs re-tuning when switching single/dual-lye

Formulator tip

Working with milk or sugar-heavy liquids — goat milk, aloe vera, beer? Switch to Mode 2 and target 30–33% concentration. That keeps fluid volume low enough to avoid scorching sugars, while still giving the lye enough solvent to fully dissolve.

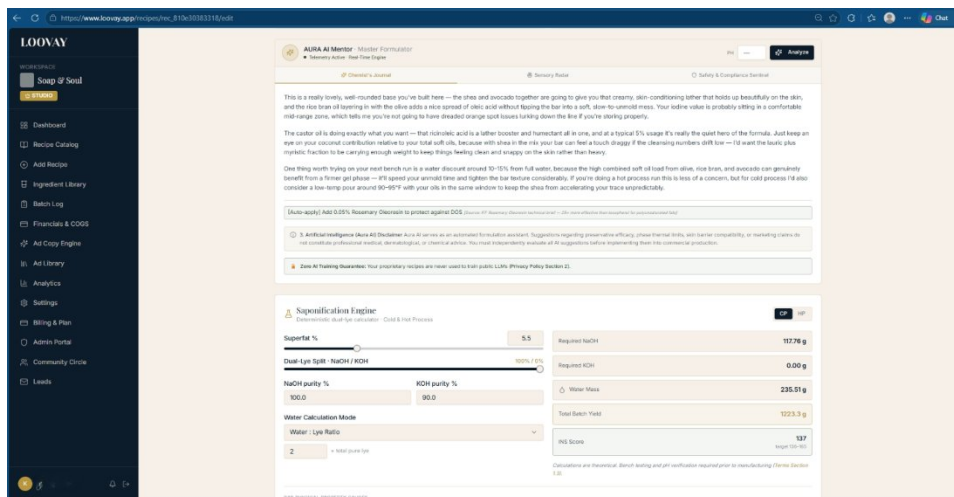
The AI Alchemist & AURA Mentor

“I pour money down the drain every week testing new formulas. Waiting weeks for a batch to cure just to discover it strips the skin or loses its lather is soul-crushing.”

What Loovay does about it

Click Analyze Formula and the AI Alchemist runs a full pre-execution simulation — chemistry, sensory feel, and safety — before you weigh out a single oil.

The Alchemist behaves like an on-call cosmetic chemist and a supportive peer formulator in one panel. Instead of a dry error log, clicking Analyze Formula produces a two-part narrative: a technical simulation, then a prediction of exactly what the finished product will feel like in a customer's hands.



The AI Alchemist Virtual Mentor Engine — chemistry review paired with a customer sensory forecast.

What it checks automatically

- Thermal sensitivity — flags heat-vulnerable actives (retinol, niacinamide, delicate essential oils) sitting in a phase heated above 40°C, and suggests moving them to a cool-down phase.
- Preservation — triggers an immediate warning if any water-containing phase has no broad-spectrum preservative attached, since an unpreserved aqueous formula grows microbes within days.
- Sensory and tactile forecast — reads the ratio of light-to-heavy esters, waxes, and humectants to predict the finished skin feel (for example: 'a rich, slow-absorbing velvet finish, ideal for a night cream').

Phase A: the pre-execution simulation



Aura AI Mentor - Master Formulator
 Telemetry Active • Real-Time Engine

9

Analyze

Chemist's Journal

Sensory Radar

Safety & Compliance Sentinel

Your fatty acid profile here is genuinely beautiful — the Shea and mango bring a lovely slow-trace stearic and oleic richness that'll give you a hard, conditioning bar with that almost creamy lather texture people obsess over. The coconut at 76° is doing the heavy lifting on cleansing and lather bubble structure, and as long as it's sitting somewhere in that 25–35% range of your total oils, you're going to have a balanced bar that doesn't strip. Pomace olive is a smart call over regular grade since the higher squalene content actually plays nicely with the shea's unsaponifiables for a skin-feel payoff you can really notice.

The jojoba is a lovely touch but remember it's technically a liquid wax ester, so it contributes almost nothing to your SAP value — just make sure your lye calculator is treating it correctly or you'll end up with a slightly off lye discount. Castor is your lather booster and binder, and I'd keep it under 8% total otherwise you risk a sticky, soft bar that takes forever to cure — that resinous quality castor brings is magic in small doses but it can really drag out your hardening time if you push it. With this much soft-oil character between the olive pomace and the liquid butters, I'd plan for a solid 6–8 week cure minimum, not the standard four.

One thing I'd play with on the bench is soaping this around 90–95°F with your oils and lye solution at similar temps — the mango and shea can behave a little unpredictably if there's any temperature differential and you get partial solidification mid-mix, which muddies your trace reads. If you're adding any botanical colorants or fragrance, test for ricing first in a small batch since the high soft-oil content can sometimes make fragrance acceleration a bit more dramatic than you'd expect. Overall though, this is a really well-considered starting lineup — I'd be excited to see how the first cut looks.

3

Artificial Intelligence (Aura AI) Disclaimer Aura AI serves as an automated formulation assistant. Suggestions regarding preservative efficacy, phase thermal limits, skin barrier compatibility, or marketing claims do not constitute professional medical, dermatological, or chemical advice. You must independently evaluate all AI suggestions before implementing them into commercial production.



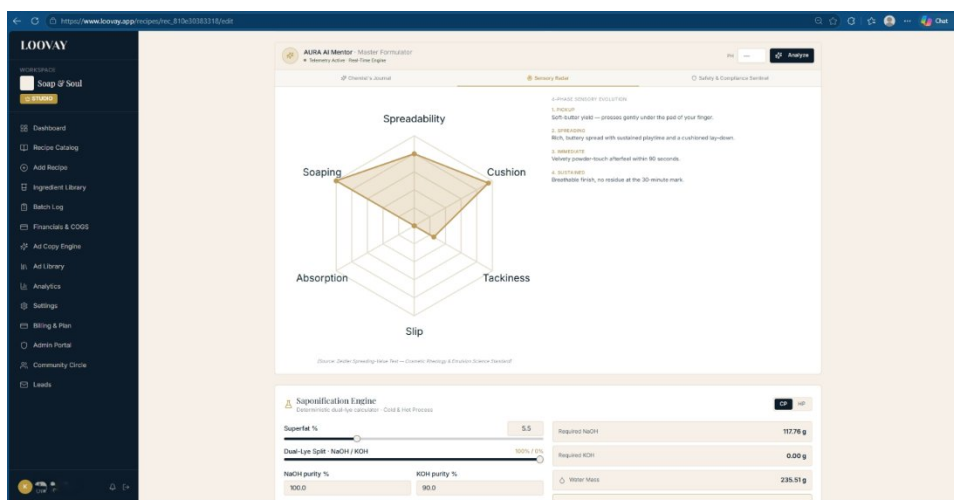
Zero AI Training Guarantee: Your proprietary recipes are never used to train public LLMs (Privacy Policy Section 2).

Phase B: the customer sensory prediction

- Visual & packaging — color, sheen, opacity, how it sits in the jar or bottle.
- First touch — pickup viscosity, cushion, bounce.
- Application — glide, spreadability, whether the emulsion transiently whitens or soaps during rub-in.
- Dry-down — the 5-minute finish versus the 8-hour barrier feel.
- Aroma evolution — top notes on application through to base notes hours later.



The Sensory Radar tab: spreadability, cushion, tackiness, slip, absorption, and soaping, plotted against a 4-phase sensory forecast.



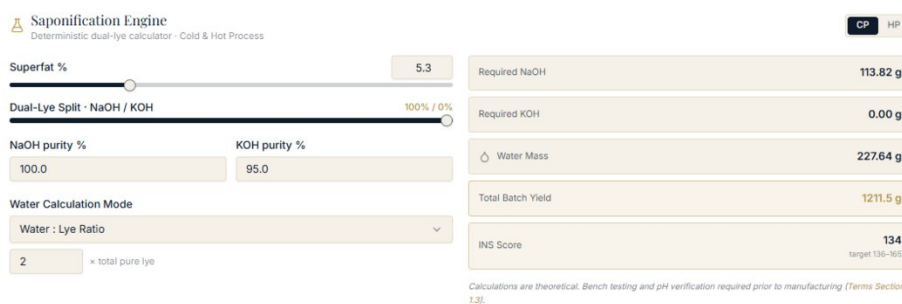
The Sensory Radar sits directly above the Saponification Engine on the same recipe page — chemistry and customer feel, side by side.

Formulator tip

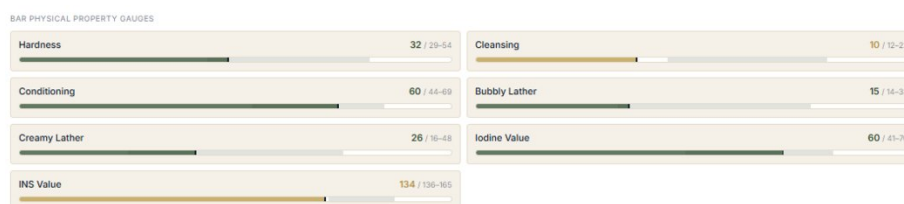
If the Alchemist predicts your cream will 'whiten or soap during rub-in,' open its recommendation tab and add 1–2% dimethicone or isoamyl laurate — it breaks the surface tension causing the effect.

Reading the yield and property outputs

The same panel that runs the Alchemist's analysis also surfaces the underlying saponification numbers and physical-property gauges it's reasoning from — so you can see exactly why it flagged what it flagged.

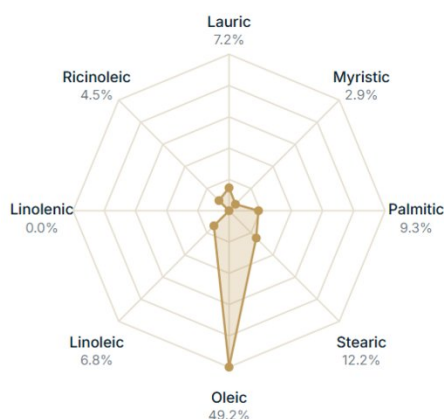


Saponification output feeding the mentor: required NaOH/KOH, water mass, total yield, and INS score.



Bar Physical Property Gauges — each metric plotted against its target window, with the current value called out.

FATTY ACID & HARDNESS RADAR



[Source: Fatty-acid mass fractions from oil-phase composition · Traditional CP/HP bar-property target windows]

TARGET PROPERTY WINDOWS

Hardness	32 / 29-54 ✓ in window
Cleansing	10 / 12-22 ↓ below range
Conditioning	60 / 44-69 ✓ in window
Bubbly Lather	15 / 14-33 ✓ in window
Creamy Lather	26 / 16-48 ✓ in window
Iodine Value	60 / 41-70 ✓ in window
INS Value	134 / 136-165 ↓ below range

The Fatty Acid & Hardness Radar, with each property checked against its target range on the right.

The Safety & Compliance Sentinel

A third tab on the same panel checks the formula against four regulatory frameworks at once and surfaces any thermal or preservation risk in plain language underneath.

AURA AI Mentor · Master Formulator
● Telemetry Active · Real-Time Engine

PH 9 **Analyze**

Chemist's Journal | Sensory Radar | **Safety & Compliance Sentinel**

EU 1223/2009
PASS
[Source: EU Cosmetic Regulation 1223/2006]

US FDA MoCRA
PASS
[Source: Modernization of Cosmetics Regulation Act 2022]

Health Canada
PASS
[Source: Health Canada Cosmetic Regulations C.R.C. c.868]

AYUSH (India)
PASS
[Source: Ministry of AYUSH — Cosmetic guidelines for herbal formulations]

IFRA 50TH SUB-ALLERGENS
No fragrance detected.

WARNING
25.0% high-stearic butters detected — risk of Beta-prime — Beta polymorphic shift producing grainy texture. Temper at 40°C for 20 min, then rapid-cool to 20°C.
[Source: Timms Confectionery Fats Handbook & Chen 2005 J Am Oil Chem Soc]

INFO
Saponified soap (pH 9-10.5, bound water) — synthetic preservative not required.
[Source: EU 1223/2009 Annex V 'exclusion' + International Journal of Cosmetic Science soap microbiology reviews]

Safety & Compliance Sentinel: EU 1223/2009, US FDA MoCRA, Health Canada, and AYUSH (India) status, plus a bench-chemistry warning.

Running an analysis

- Stage your recipe, assigning every ingredient to Phase A (water), B (oil), or C (cool-down).
- Confirm usage rates and target application type are set.
- Click Analyze Formula in the top-right of the recipe toolbar.
- Review the pre-execution warnings, then click Apply Recommended Tweaks to accept a fix automatically.
- Read the sensory prediction to check it matches what you're marketing the product as.

Compliance & Regulatory Guard

“Formatting INCI lists, tracking down EU fragrance allergens, and building safety logs takes me days. I feel like a full-time compliance officer instead of a formulator.”

What Loovay does about it

One panel generates your legal INCI declaration, checks every fragrance allergen against IFRA limits, and screens your formula against major retailer blacklists — all from the same ingredient data you already entered.

The Regulatory, INCI & Compliance Guard reads your master formula and continuously checks it against four things at once: descending-weight INCI formatting, IFRA 50th Amendment allergen limits, retailer clean-beauty blacklists, and jurisdictional restricted-substance rules (US FDA, Health Canada, EU 1223/2009).

Automated INCI sorting rules

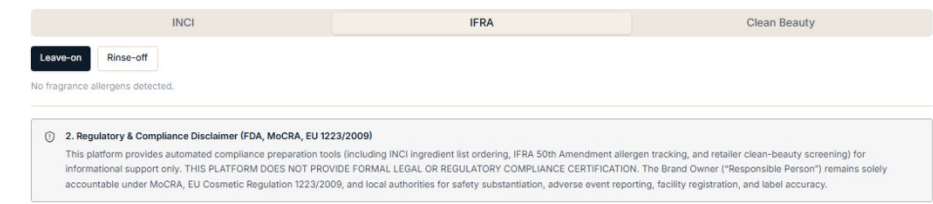
- Above 1% by weight: ingredients are locked into strict descending order, highest concentration first.
- At or below 1%: grouped after the >1% block, but freely reorderable — drag botanicals or actives forward for label storytelling without breaking compliance.
- Fragrance blends: consolidated under "Parfum" (EU/Canada) or "Fragrance" (US), with individually regulated allergens (limonene, linalool, citral, geraniol) auto-appended when they cross a disclosure threshold.
- Colorants: every color additive is placed at the very end of the deck and mapped to its official Color Index number — titanium dioxide becomes "CI 77891," red iron oxide becomes "CI 77491."

IFRA allergen aggregation

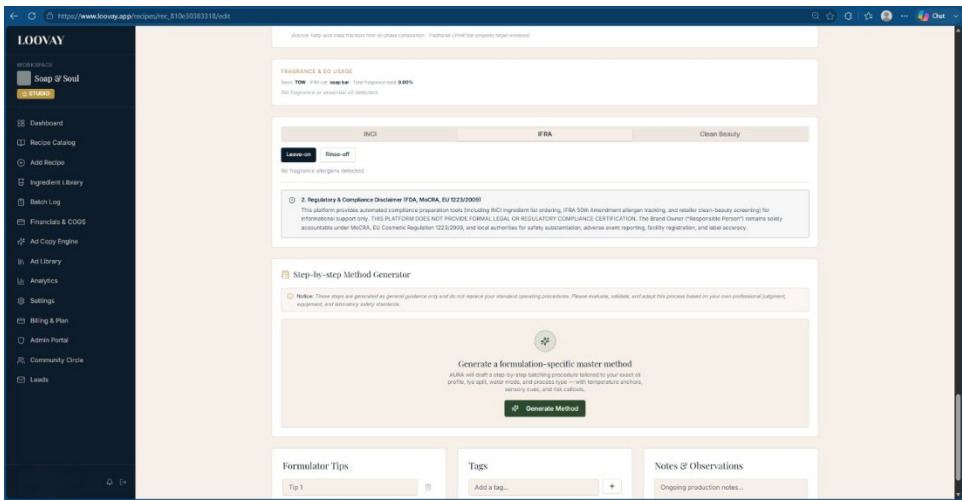
The engine sums each allergen's concentration across every essential oil and fragrance blend in the formula, then checks it against the disclosure threshold for how the product is used:

Product type	Disclosure trigger
Rinse-off (soap, shampoo, wash)	Above 0.01% (100 ppm)
Leave-on (lotion, cream, serum)	Above 0.001% (10 ppm)

It also checks the total fragrance load against the specific IFRA application category you select — Category 9 for rinse-off soap, Category 5A for leave-on body lotion — and throws a real-time breach alert if a blend exceeds the ceiling for that category, naming the exact constituent and the percentage to cut back to.



The IFRA tab — toggle Leave-on or Rinse-off to switch the allergen disclosure threshold applied below.



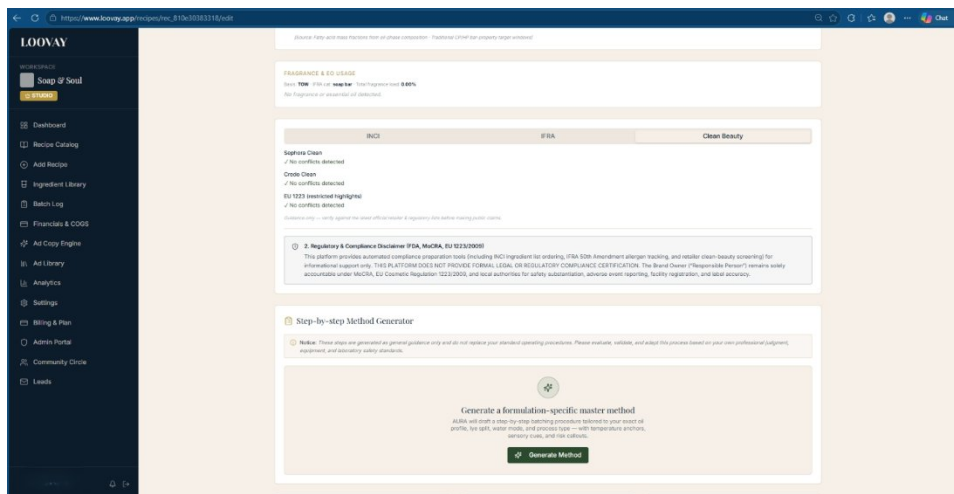
The IFRA tab in context: it lives directly above the Manufacturing Method Generator on the same recipe page.

Clean beauty & blacklist screening

Standard	What it screens for
Sephora Clean	Parabens, sulfates (SLS/SLES), phthalates, mineral oils, formaldehyde, cyclic silicones (D4/D5)
Credo Clean	The 2,000+ item Credo Dirty List, natural-origin claims, ethoxylated compound limits
EU 1223/2009	Annex II (prohibited) and Annex III (restricted) substances



The Clean Beauty tab — a pass/fail read against each retailer or regulatory list, with a guidance note underneath.



The Clean Beauty tab in full context, sitting above the Manufacturing Method Generator.

Running a compliance audit

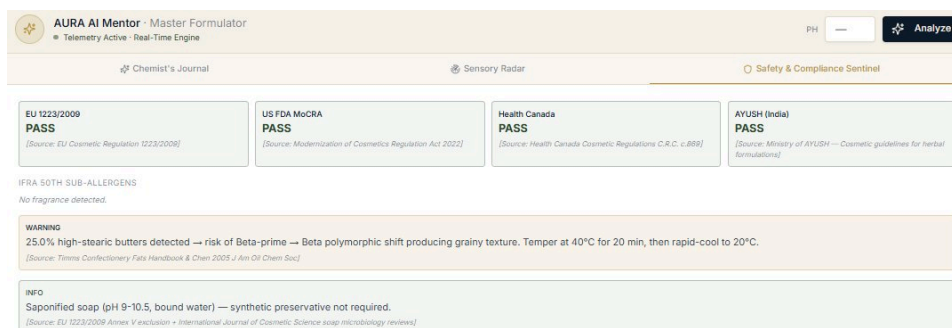
- Open the Compliance Guard tab and set your product's application category — Category 9 (wash-off), 5A (leave-on lotion), or 5B (leave-on facial moisturizer).
- Check the retailer standards you want to screen against — Sephora Clean, Credo Clean, EU 1223/2009.
- Review status badges: green PASSED, or a red/yellow WARNING naming the specific non-compliant ingredient.
- Open the IFRA Allergen Summary Drawer to confirm every fragrance component sits under its disclosure limit.
- Click Generate Regulatory Compliance Certificate to export a dated PDF dossier — INCI statement, IFRA pass report, allergen summary, and blacklist audit — for your records.

Formulator tip

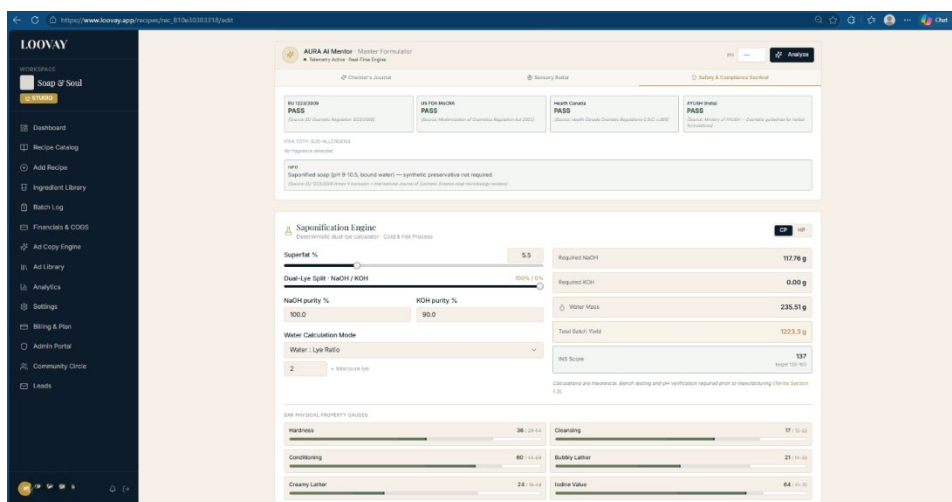
Formulating a leave-on product? Check essential-oil usage rates before you finalize batch size. Oils high in citral, or bergapten-containing citrus oils, often carry safe-use ceilings below 1.0% — easy to miss if you're used to soap-only percentages.

Multi-region status, at a glance

The same Safety & Compliance Sentinel that backs the AI Alchemist also sits inside the compliance workflow, giving a single pass/fail read across every jurisdiction you sell into before you touch the INCI generator.



Safety & Compliance Sentinel — EU, US, Canada, and India status in one row, with any bench-chemistry warning below it.



The Sentinel sits directly above the Saponification Engine — regulatory status and lye math on the same screen.

The Legal INCI Label Generator

This is the export layer that turns compliant formula data into a print-ready ingredient declaration for the US, Canada, or the EU — with one important choice specific to soap: pre-saponified or post-saponified format.

Pre-saponified (US FDA default)

Lists the raw starting materials as they went into the pot, lye included, with Latin botanical names alongside their common English translation:



Example pre-saponified INCI output: raw oils and lye listed as added, before the reaction.

Post-saponified (EU / Health Canada)

Calculates the sodium or potassium carboxylate salts actually formed by the reaction — olive oil plus NaOH becomes "Sodium Olivates" — and auto-calculates the exact mass of glycerin produced as a reaction byproduct. Any intentional superfat oil left unreacted is listed separately under its raw INCI name.

Formulator tip

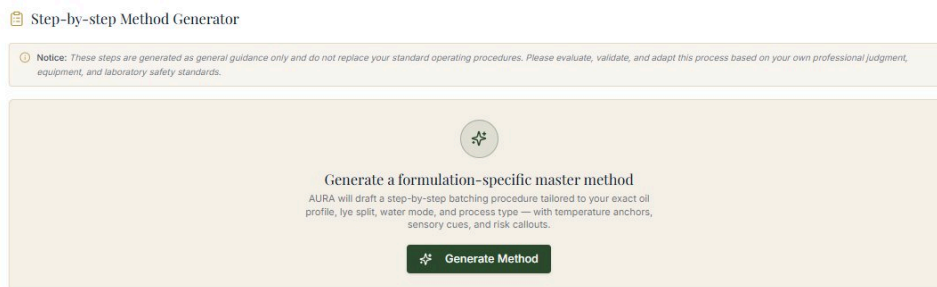
Selling in the US and want to claim "Contains Real Glycerin" on the label? You have to use the post-saponified format — glycerin only legally appears in the ingredient deck that way.

Generating a label

- Open your finished recipe and go to the Regulatory & Labeling tab.
- Choose your jurisdiction — US, Canada, or EU/UK — and toggle pre- or post-saponified format.
- Review the auto-sorted preview; ingredients above 1% show a locked descending-order badge.
- Drag sub-1% botanicals or colorants in the flexible block into your preferred label sequence.
- Click Copy INCI Text to paste directly into your labeling software, or Download Regulatory Dossier for a timestamped compliance record.

The Manufacturing Method Generator

Generic boilerplate instructions don't account for what's actually in your recipe. The method generator, found in the Manufacturing Method section of Add Recipe, compiles your entire active formula — fatty acid speed, water concentration, lye purity — and builds a temperature-anchored procedure specific to that batch.



The Manufacturing Method Generator's starting card — one click drafts a procedure from your exact oil profile and lye split.

What gets generated

1. Before you begin

A pre-flight safety checklist: PPE suited to your actual chemicals (face shield and double-gloving for dual-lye or low-water batches), a vessel and equipment recommendation matched to batch mass and expected heat, and a pre-calculated staging list of every scale weight in addition order.

2. Phase-aware, temperature-anchored steps

- Lye solution prep — target water temperature, dissolution sequence for dual-lye (NaOH before KOH, to avoid a heat-driven boil-over), fume mitigation, cooling time.
- Oil phase prep — melting profile matched to your hardest fat, target oil temperature to avoid false trace or thermal shock.
- Emulsification & tracing — target temperature gap between lye and oil (generally within 5–10°F), blending cadence matched to how fast your fatty acid profile will trace.
- Molding or cooking — CP-specific pour and insulation guidance, or HP-specific cook-stage monitoring through the vaseline and translucent-gel phases.

3. Mentor observations

Formula-specific callouts flag exactly what to watch for — for example, a high-lauric, high-concentration recipe gets a direct warning to keep stick-blending under 15 seconds and have colorants and molds ready before combining phases, because trace will move fast.

4. Post-batching & curing

An unmolding window calculated from your recipe's hardness score, a cutting-timeline recommendation to avoid crumbling edges, and a cure duration (typically 4–6 weeks for CP water evaporation, or a pH-verification step for HP).

What the output actually looks like

Step-by-step Method Generator

Regenerate

Edit Method

Notice: These steps are generated as general guidance only and do not replace your standard operating procedures. Please evaluate, validate, and adapt this process based on your own professional judgment, equipment, and laboratory safety standards.

BEFORE YOU BEGIN — PRE-FLIGHT & SAFETY CHECKLIST

PPE

- Chemical-splash goggles
- Nitrile or neoprene gloves
- Long-sleeve apron
- Well-ventilated workspace with fume extraction if handling lye

VESSELS & TOOLS

- Stainless steel or heat-safe PP #5 plastic
- Digital scale accurate to 0.1 g
- Digital thermometer / IR thermometer
- Stick blender
- Silicone spatulas
- Pre-lined mold

STAGING

- Pre-weigh all oils, lye, and water per the recipe totals (Batch yield 1211.5 g)

SAFETY

- Sodium hydroxide is caustic — keep white vinegar within arm's reach as a neutralizer.
- Always add lye to water, never the reverse, to prevent volcano-style boil-over.
- Late-addition ingredients (Coconut Oil 76, Olive Oil Pomace, Jojoba Oil, Castor Oil) may stain or fume — line the workstation with parchment.

Before You Begin: PPE, vessels and tools, and a pre-weighed staging list — plus safety notes specific to the alkali in this recipe.

Phase 1 · Lye Solution Preparation

35–45°C after cooling

1

Weigh 113.8 g NaOH and 0.0 g KOH separately. Slowly add both to 227.6 g of cold distilled water — never the reverse — stirring 60 seconds until fully dissolved. Cool to 35–45°C.

Watch out:

Exothermic — the solution will spike above 80°C.

Phase 2 · Oil & Lipid Melt (Shea Butter, Mango Butter, Coconut Oil 76, Olive Oil Pomace, Jojoba Oil, Castor Oil)

40–50°C

1

Melt the hardest fats first (e.g., coconut, shea, cocoa butter), then blend in the liquid oils (Shea Butter, Mango Butter, Coconut Oil 76, Olive Oil Pomace, Jojoba Oil, Castor Oil). Hold at 40–50°C for uniformity.

Mentor Tip:

High-stearic butters benefit from a longer melt hold to avoid false trace later.

Phase 3 · Emulsification & Trace Additions

38–45°C both phases within 5°C

1

Combine the lye water into the oil phase. Pulse-blend for 3 seconds × 4 alternating with 30-second hand-folds until light-to-medium trace. Fold in the Phase C/D adds (Coconut Oil 76, Olive Oil Pomace, Jojoba Oil, Castor Oil) at light trace, working quickly if activated charcoal or accelerating essential oils are present.

Mentor Tip:

High-lauric (coconut) or high-ricinoleic (castor) will accelerate trace — minimise blending time.

Phase 4 · Pouring, Molding & Insulation

Room temp

1

Pour into a lined mold, tap out air bubbles, insulate 24–48 h for full saponification, then unmold and cut.

The phase-by-phase procedure — lye prep, oil melt, emulsification, and molding — each with its own target temperature and a mentor tip.

© 2026 Loovay — All Rights Reserved · Confidential — Not for Distribution · 23

Mentor observations, sensory indicators, troubleshooting, and the post-batching QC checklist that closes out the generated method.

- Finish your recipe — target weights, process (CP or HP), superfat, and water ratio all confirmed in the summary panel.
- Scroll to Manufacturing Method and click Generate Method.
- Review the output for temperature targets and equipment setup, and add manual notes directly in the editor.
- Click Save Recipe to link the procedure to your batch logs and production runs.

Added a fast-accelerating essential oil or changed your water discount after generating a method? Click Generate Method again — it updates the safety callouts and blending cadence to match your new formula.

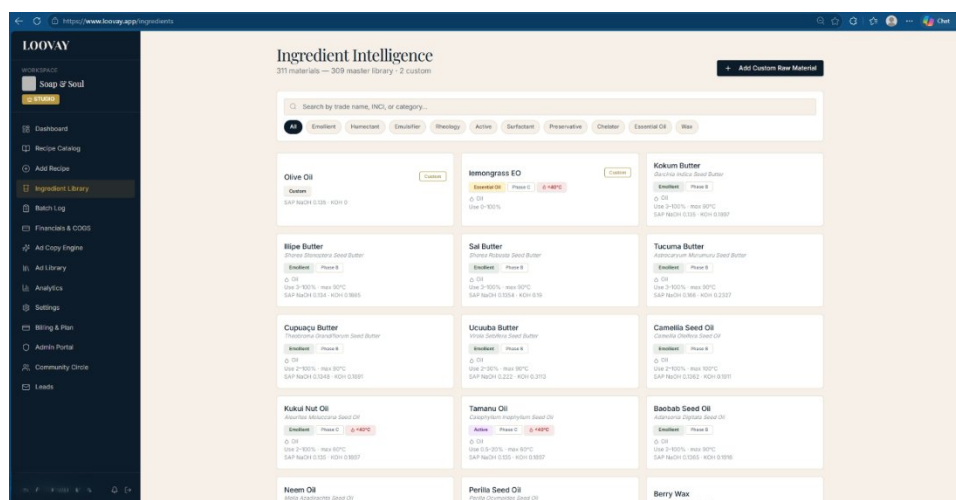
The Master Ingredient Library

“Every time I want to try a new butter or clay, I end up down a rabbit hole of old textbooks and vendor sheets. I just want its SAP value, usage rate, and skin benefits in five seconds.”

What Loovay does about it

A single, verified database of 300+ raw materials — SAP constants, thermal limits, safety data, and sensory scores — searchable in one box.

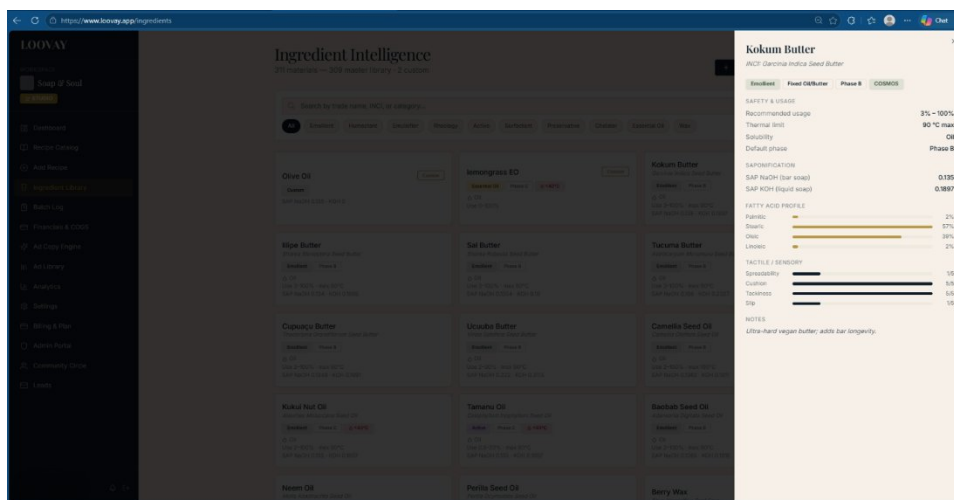
The library ships pre-loaded across 14 functional categories: hard oils and butters, soft oils, waxes, emollients, water and humectants, thickeners and rheology modifiers, emulsifiers, surfactants, active extracts, powders, essential oils, additives and fragrance, and preservatives.



The Ingredient Library, filterable by category pill — Emollient, Humectant, Emulsifier, Active, and more.

What's in every ingredient record

- Formulation phase default — Phase A (aqueous), B (oil), C (cool-down/heat-sensitive), or D (pH adjusters/trace additives).
- Solubility and thermal limits, including an explicit heat-sensitivity flag for anything that degrades above 40°C.
- Regulatory badges — COSMOS, ECOCERT, USDA Organic, ISO 16128 natural-origin index, and any IFRA restriction.
- Dual SAP values (NaOH and KOH) for anything saponifiable.
- Tactile scores on a 1–5 scale for spreadability, cushion, tackiness, and slip.



A full ingredient record — safety data, SAP constants, fatty acid breakdown, and tactile sensory profile.

Adding a custom raw material

Click + New Ingredient, enter the trade name and legal INCI name, and assign a functional category and default phase. For saponifiable lipids, enter both SAP values and the fatty acid breakdown; for functional actives, open the Biomarker Tracker to log the standardized active percentage — for instance, a green tea extract's EGCG concentration — so the engine can calculate the true active dose delivered in the finished formula, not just the raw material's inclusion rate.

Formulator tip

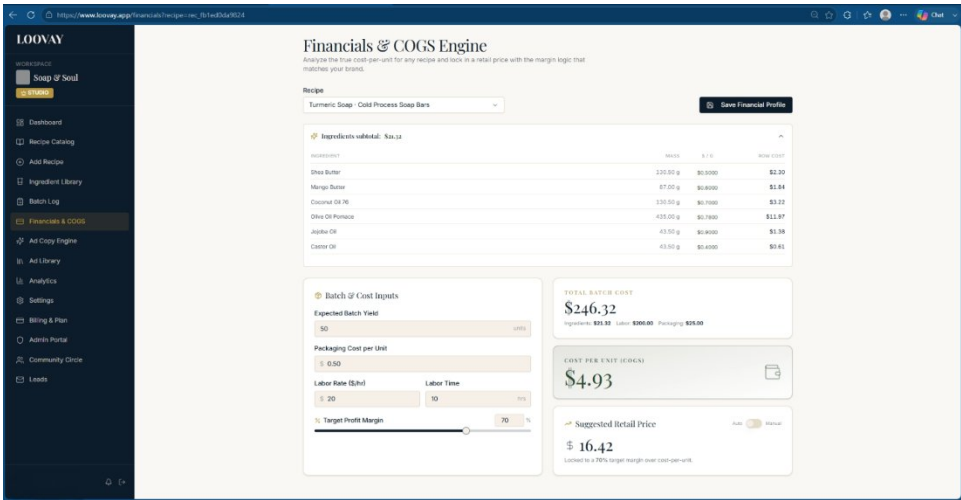
Flag any cold-pressed botanical extract containing active polyphenols or carotenoids as heat-sensitive below 40°C. That forces the formulation engine to assign it to Phase C automatically, protecting it from degrading during manufacture.

Financials & COGS Engine

“Raw material prices keep rising, but updating my cost spreadsheets is a nightmare. I know my revenue, but not my true cost per unit once packaging and scrap are factored in.”

What Loovay does about it

Raw material cost, packaging, and labor feed one live engine that gives you a true unit cost down to fractions of a cent, and a retail price locked to your target margin.



The Financials & COGS panel — total batch cost, unit COGS, and suggested retail price, updating live.

Ingredients subtotal: \$665.55			
INGREDIENT	MASS	\$ / G	ROW COST
Shea Butter	87.00 g	\$0.5000	\$43.50
Castor Oil	43.50 g	\$0.6000	\$26.10
Cocoa Butter	87.00 g	\$0.7000	\$60.90
Olive Oil	435.00 g	\$0.7800	\$339.30
Coconut Oil 76	217.50 g	\$0.9000	\$195.75

The ingredients subtotal, expanded to a per-line breakdown of mass, cost per gram, and row cost.

The four numbers that matter

Metric	Formula
Direct labor cost	Hourly rate × labor hours worked
Total batch cost	Ingredient subtotal + packaging subtotal + labor cost
Unit COGS	Total batch cost ÷ planned batch output (units)
Suggested retail price	Unit COGS ÷ (1 - target margin %)

Override the retail price manually and the engine flips the last formula around, showing you the effective margin that price actually yields — useful for checking a wholesale price or a promotional discount against your floor before you commit to it.

The screenshot shows a web interface with two main sections. On the left is the 'Batch & Cost Inputs' form, and on the right are three stacked result cards.

Batch & Cost Inputs:

- Expected Batch Yield:** 50 units
- Packaging Cost per Unit:** \$ 0
- Labor Rate (\$/hr):** \$ 0
- Labor Time:** 0 hrs
- % Target Profit Margin:** A slider set to 70%

Result Cards (Right):

- TOTAL BATCH COST:** \$665.55 (Ingredients: \$665.55, Labor: \$0.00, Packaging: \$0.00)
- COST PER UNIT (COGS):** \$13.31
- Suggested Retail Price:** \$ 44.37 (Locked to a 70% target margin over cost-per-unit. Auto/Manual toggle is set to Auto)

Batch & Cost Inputs on the left; Total Batch Cost, Cost Per Unit, and Suggested Retail Price recalculating live on the right.

This image shows the three result cards from the previous screenshot stacked vertically. The data remains the same: Total Batch Cost of \$665.55, Cost Per Unit of \$13.31, and a Suggested Retail Price of \$44.37.

The same three result cards in their stacked layout — total cost, unit COGS, and suggested retail price.

Setting it up

- Open Financials & COGS from the sidebar and select the recipe.
- Enter Expected Batch Yield — how many finished units the batch produces.
- Enter your Hourly Labor Rate and the Labor Time spent compounding and packaging.
- Confirm raw material and packaging costs are attached to the recipe.
- Set your Target Gross Margin % — the Suggested Retail Price locks and updates automatically.
- Or switch to Manual Price Override to test a specific number and see the resulting margin instantly.
- Click Save Financial Profile to Recipe to attach the pricing baseline to your master record.

Formulator tip

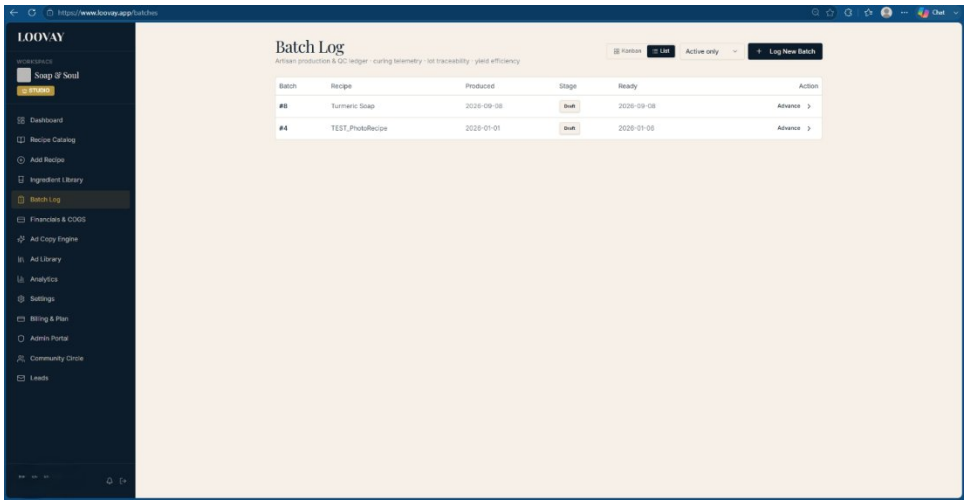
Running a wholesale or promotional price test? Use Manual Price Override so you can see, in real time, whether that number still clears your minimum unit-COGS safety threshold before you commit to it.

Batch Log, Curing & Lot Traceability

“Once I pour a batch, tracking curing stages, QC checks, and notes falls apart. I lose track of what's ready to wrap and what needs another week on the rack.”

What Loovay does about it

A five-stage Kanban board follows every batch from pour to shelf-ready, with cure-weight tracking, QC scoring, and supplier lot numbers linked to the same batch ID.



The Batch Log — toggle between Kanban and List view, sorted by stage and readiness date.

The five lifecycle stages

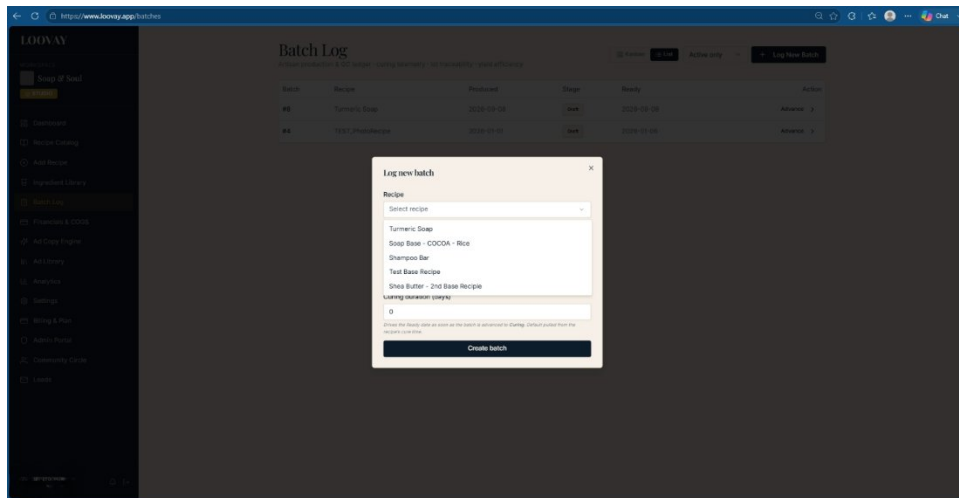
- In Production — active compounding, oil heating, lye mixing.
- Molded / Gelling — poured, undergoing gel phase or thermal hold.
- Cut & Stamped — unmolded, sliced into units, stamped with your logo.
- Curing Chamber — resting on racks for water evaporation and crystal-lattice stabilization.
- QC Passed & Ready — cleared pH, lather, and weight checks; moved to the Finished Goods Vault.

Each card shows a batch code, linked recipe name, a circular cure-countdown ring ("Day 14 / 28"), ambient room temperature and humidity, and color-coded status badges: pH Verified, Weight Stabilized, or a red Variance Flagged if yield or weight loss falls outside range.

Starting a batch

- Click + Log New Batch, select the target recipe, and enter the curing duration in days — the target readiness date calculates automatically.

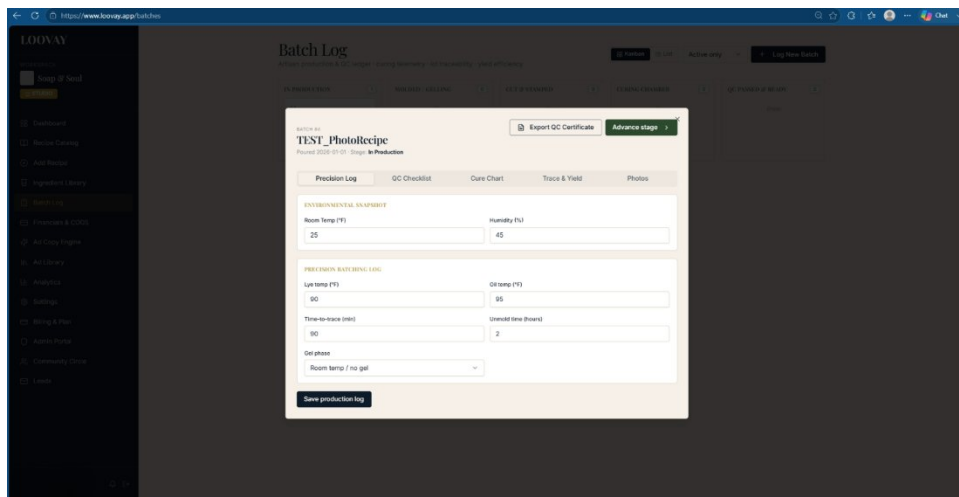
- Click Create Batch to generate a unique Batch ID.
- Assign a supplier lot number to every raw material line item under Trace & Yield — this is what makes a recall audit instant instead of a week of digging through paper notes.



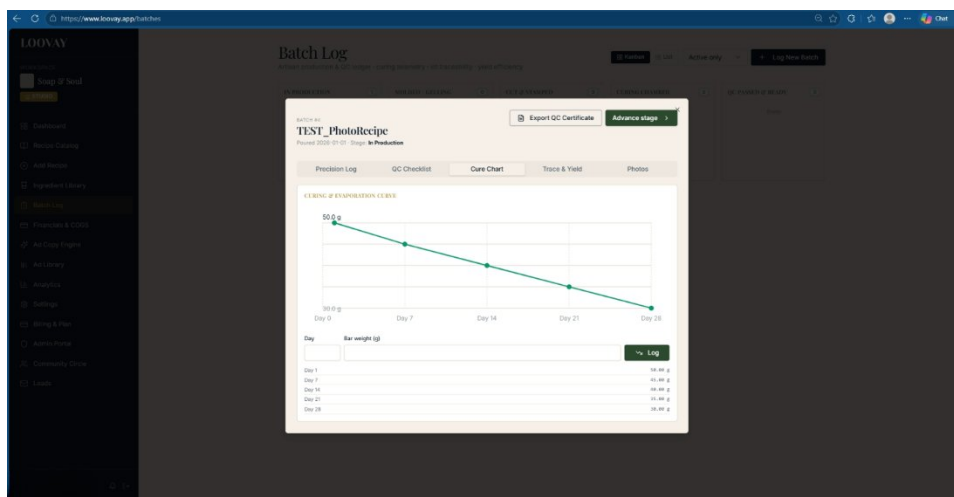
The Log New Batch modal — pick a recipe from your catalog and set the curing duration to generate a Batch ID.

Logging production telemetry

Inside the batch, the Precision Log tab captures the numbers that actually predict a good cure: lye temperature, oil temperature, time-to-trace in minutes, unmold time, and gel-phase condition (full gel, partial gel, or inhibited). The engine flags a thermal mismatch of more than 5°C between the lye solution and oil phase at combination.



The Precision Log tab — environmental snapshot and batching telemetry logged against the active batch card.



Weekly cure-weight entries plotted as an evaporation curve; the batch is flagged complete once the slope flattens.

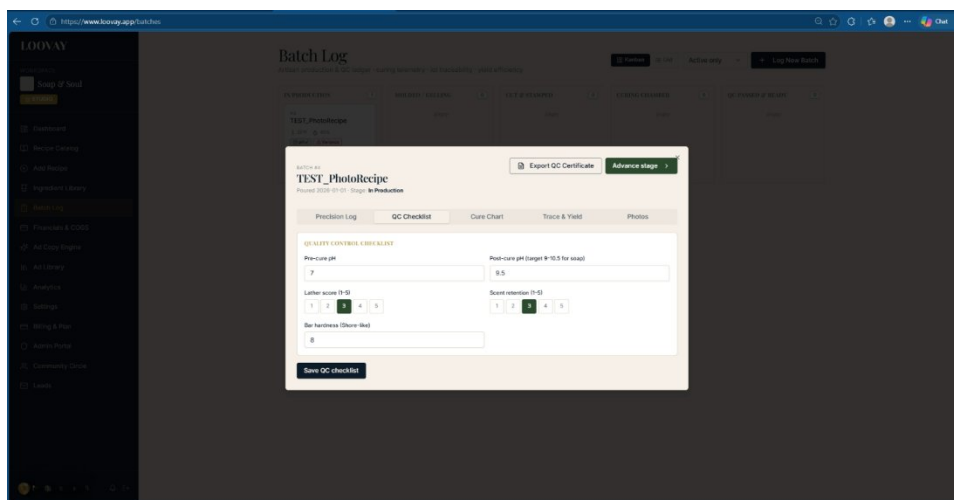
Tracking the cure

Weigh a sample bar weekly and log the mass. The engine plots the water-loss curve automatically:

Formula	Meaning
$\text{Evaporation \%} = (\text{Day 1 weight} - \text{current weight}) \div \text{Day 1 weight} \times 100$	Once weekly moisture loss drops under 0.5% for a full week, the batch is flagged Cure Complete

Quality control before release

QC check	Pass target
Pre-cure pH	10.0 – 11.5 (at unmolding)
Post-cure pH	8.5 – 9.5 (fully cured)
Lather score (1–5)	≥ 4.0
Scent retention (1–5)	≥ 4.0
Bar hardness (1–5)	≥ 4.0, firm edges, no sticky core

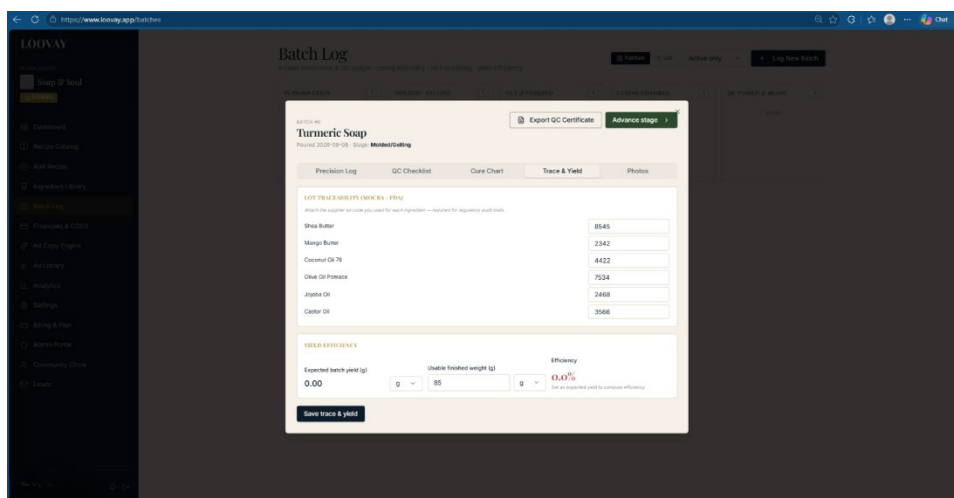


The QC Checklist tab — pre- and post-cure pH, lather score, scent retention, and bar hardness, logged against the batch card visible behind it.

Enter results in the QC Checklist tab, then use Advance Stage to move the batch forward. Click Export QC Certificate at any point for a printable lot report.

Lot traceability and yield

Every ingredient line maps to the supplier lot code you entered — click any code to generate a bi-directional recall map showing exactly which finished units and customer orders contain material from that lot. Yield efficiency is calculated as usable finished weight divided by total expected batch yield; anything trimmed or scrapped logs as Trim Weight and folds straight into unit COGS.



The Trace & Yield tab in full — supplier lot codes on the left, expected-versus-usable yield on the right.

LOT TRACEABILITY (MOCRA / FDA)

Attach the supplier lot code you used for each ingredient — required for regulatory audit trails.

Shea Butter	56555
Castor Oil	54813
Cocoa Butter	134185
Olive Oil	74863
Coconut Oil 76	12854

A closer look at the lot-code fields: one supplier lot number attached to every raw material in the batch.

YIELD EFFICIENCY

Expected batch yield (g)	Usable finished weight (g)	Efficiency
870.00	860	98.9%
g	g	= (860 g ÷ 870 g) × 100 · normalised to grams

Yield Efficiency: expected batch yield against usable finished weight, calculated live as a percentage.

Formulator tip

Yield efficiency dropping under 92%? Check your Trim Weight logs — clean soap trimmings can be re-routed into inventory as a "rebatch / soap shreds" raw material to recover some of that cost.

Exporting a QC certificate

Click Export QC Certificate on any batch to generate a dated, printable lot report — batch ID, QC results, curing and weight-loss data, environmental conditions, and every supplier lot code, all on one page you can hand to a retailer or keep for your own compliance file.

LOOVAY

QC BATCH CERTIFICATE

Batch #9
2026-09-12
Issued September 12, 2026

Test Base Recipe

Certificate of Quality Control · DRAFT_RECIPE

PH RESULT: pH not logged

BATCH #

9

POURED

2026-09-12

STAGE

DRAFT_RECIPE

READY DATE

2026-10-12

QUALITY CONTROL RESULTS

PRE-CURE PH

—

POST-CURE PH

—

LATHER (1-5)

—

SCENT (1-5)

—

HARDNESS

—

CURING & WEIGHT LOSS

No cure weight readings logged for this batch.

ENVIRONMENTAL CONDITIONS

ROOM TEMP

—

HUMIDITY

—

LYE TEMP

—

OIL TEMP

—

YIELD EFFICIENCY

EXPECTED YIELD

870.0 g

USABLE WEIGHT

860.0 g

EFFICIENCY

98.9%

LOT TRACEABILITY (MOCRA / FDA)

INGREDIENT	INCI	SUPPLIER LOT CODE
Shea Butter	Butyrospermum Parkii Butter	56555
Castor Oil	Ricinus Communis Seed Oil	54813
Cocoa Butter	Theobroma Cacao Seed Butter	134185
Olive Oil	Olea Europaea Fruit Oil	74863
Coconut Oil 76	Cocos Nucifera Oil	12854

Loovay QC Batch Certificate · Batch #9 · Recipe: Test Base Recipe · Generated 9/12/2026 1:46:11 AM

An exported QC Batch Certificate — quality results, environmental conditions, yield efficiency, and full lot traceability in one document.

The Adaptive Scale-Up Assistant

“My test batch was perfect, but the full production run separated and the scent vanished. The heat and mixing dynamics completely changed and I don't know how to adapt the steps.”

What Loovay does about it

The scale-up assistant adjusts phase mixing, temperature holds, and cooling rates automatically as batch volume grows, so texture and scent throw hold at commercial scale.

Scaling the batch

Update the Total Batch Oil Weight field — from a 1 kg bench sample up to a full tank size — and pick your unit (g, kg, oz, lb). Every ingredient recalculates automatically, preserving the exact percentage ratios from your original test batch.

Total Batch Oil Weight (oz)

Baseline oil-phase weight. Percentages sum to 100% of oils; lye + water are computed on top by the Saponification Engine.

30.6884

Default Unit

Applied to every new row. Rows can still override.

oz

OIL ROWS %

100.00% / 100.00%

Total Batch Oil Weight and Default Unit — every ingredient row recalculates off this one field.

Phase and thermal controls

Assign each raw material to Phase A, B, or C, and set a processing and hold temperature for each — larger batches carry more thermal mass, so a temperature that worked at 1 kg won't behave the same at 50 kg. Keep heat-sensitive fragrance and botanicals in a cool-down phase to protect scent throw from flashing off during large-volume mixing.

Ingredients

Type either **Mass** or **%** — the last field you touch drives the row. Unit and cost per unit are per-row overrides.

PHASE	INGREDIENT
Phase	Shea Butter INCI: Butyrospermum Parkii Butter · max 90°C · SAP 0.128
Phase	Mango Butter INCI: Mangifera Indica Seed Butter · max 90°C · SAP 0.137
Phase	Coconut Oil 76 INCI: Cocos Nucifera Oil · max 120°C · SAP 0.178
Phase	Olive Oil Pomace INCI: Olea Europaea (Olive) Pomace Oil · max 100°C · SAP 0.135
Phase	Joboba Oil INCI: Simmondsia Chinensis Seed Oil · max 120°C · SAP 0.092
Phase	Castor Oil INCI: Ricinus Communis Seed Oil · max 120°C · SAP 0.129

● Active driver highlighted · dimmed field shows auto-computed value.

Ingredient rows carrying their phase, INCI name, thermal max, and SAP value as the batch scales.

Verifying before you commit

- Check the Formulation Guardrails panel for automated stability warnings before scaling up further.
- Watch the Ingredient Cost panel — cost scales with volume, and this is the moment to catch a pricing surprise before the batch is poured.
- Click Save Recipe to lock in your scale-up parameters.

The Ad Copy Engine & Ad Library

"I am a chemist at heart, not a marketer. Staring at a blank screen trying to write captions that actually convert makes me freeze up, and generic AI copy sounds like a boring robot."

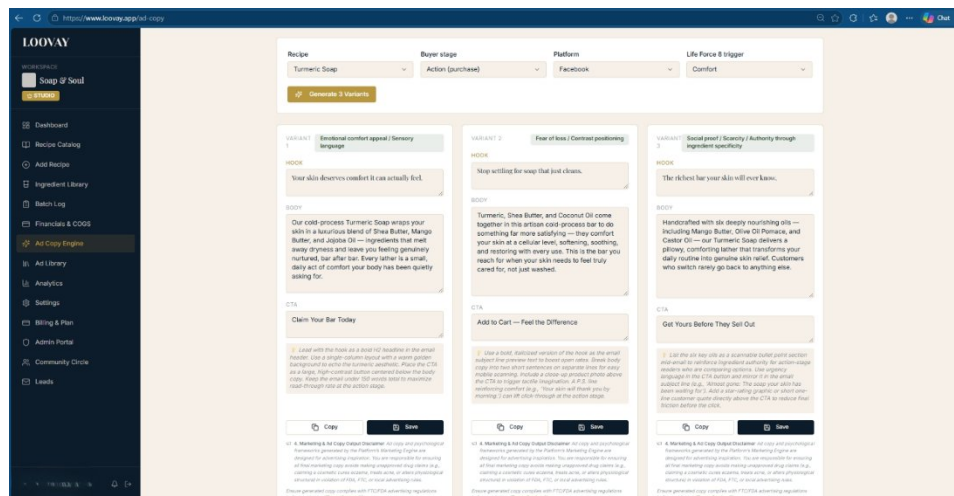
What Loovay does about it

The Ad Copy Engine turns your recipe's actual ingredients and benefits into platform-tailored copy, built on proven persuasion structure instead of a blank page.

Setting the campaign parameters

- Recipe — the specific formula you're featuring.
- Buyer stage — Awareness, Consideration, or Action (purchase).
- Platform — Facebook, Instagram, or another channel.
- Life Force 8 trigger — the core psychological angle: comfort, fear of loss, ingredient authority, aspirational identity, and others.

Click Generate 3 Variants.



The Ad Copy Engine — recipe, buyer stage, platform, and psychological trigger feed three generated variants.

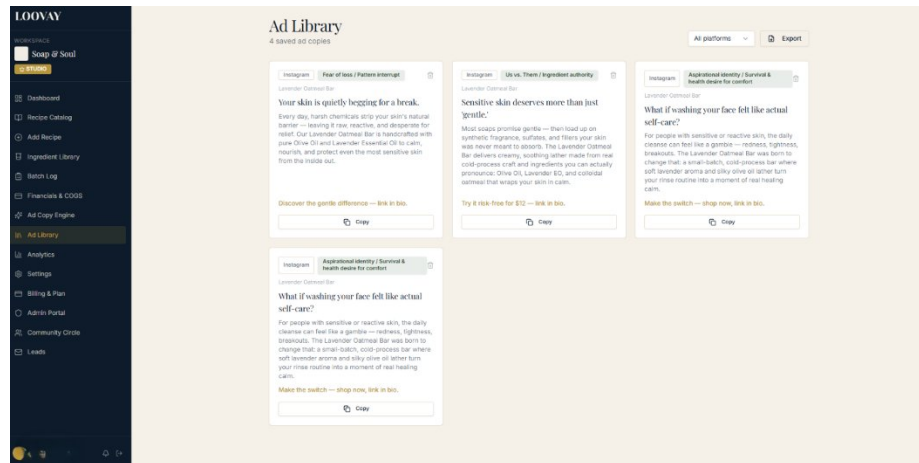
Reading a copy card

- Hook — the opening line built to interrupt scrolling ("Your skin is quietly begging for a break.")
- Body — narrative copy drawn directly from your recipe's real ingredients and skin benefits.
- Call to action — a conversion line matched to the buyer stage ("Claim your bar today," "Try it risk-free for \$12.")

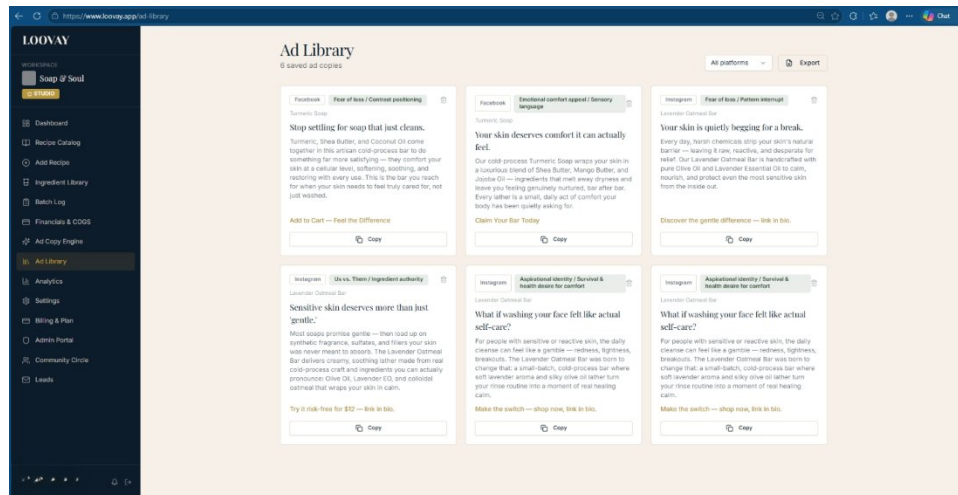
— Implementation hints — placement guidance for email layout, font styling, or creative pairing.

Saving and managing copy

Click Copy to paste a variant straight into your social scheduler, or Save to file it in the Ad Library. From the library, filter by platform or click Export to download your full saved campaign for launch.



The Ad Library — saved copy cards, filterable by platform, ready to export for launch.

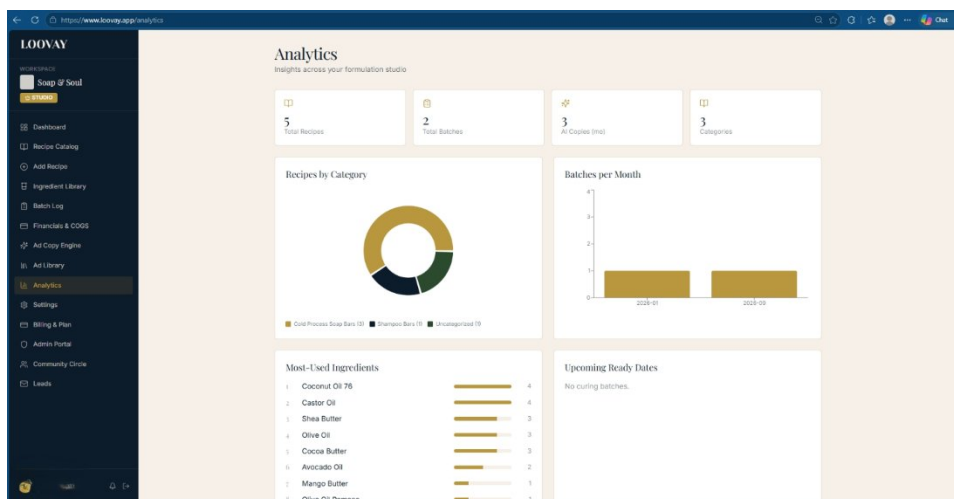


The full Ad Library grid: six saved copies, each tagged with its platform and psychological angle.

Performance Analytics & Workspace Settings

Studio metrics

Analytics rolls up production throughput, yield efficiency, and margin trends across your whole recipe catalog and batch history — the view to check before deciding whether to raise a wholesale price or push harder on a slow-moving product line.



The Analytics dashboard — throughput, yield efficiency gauges, and margin trend lines in one view.

Workspace settings and billing

Settings holds your unit-conversion defaults, compliance jurisdiction profile, and workspace details. Billing & Plan is where subscription tier, usage metering (active recipes, AI generations, PDF exports), and payment details live.

The Settings page allows users to manage their workspace and profile. It is divided into two main sections: Workspace and Profile.

Workspace Settings:

- Brand logo:** Option to change the logo.
- Workspace name:** Field to enter the workspace name.
- Write label name:** Field to enter the label name.
- Currency:** Dropdown menu (currently set to CAD).
- Default tax:** Dropdown menu (currently set to NoTax).
- Weight unit:** Dropdown menu (currently set to Grams).
- Volume unit:** Dropdown menu (currently set to mL).
- Save Workspace:** Button to save changes.

Profile Settings:

- Name:** Text input field.
- Email:** Text input field.
- Save Profile:** Button to save changes.

Change Password:

- Current password:** Text input field.
- New password:** Text input field.
- Change Password:** Button to update the password.

Notifications:

- Batch ready alerts:** Toggle switch (currently turned on).
- Team activity:** Toggle switch (currently turned on).
- Save Preferences:** Button to save notification settings.

Workspace Settings — unit conversions, compliance profile, and account-level configuration.

Loovay Circle: Community & Peer Support

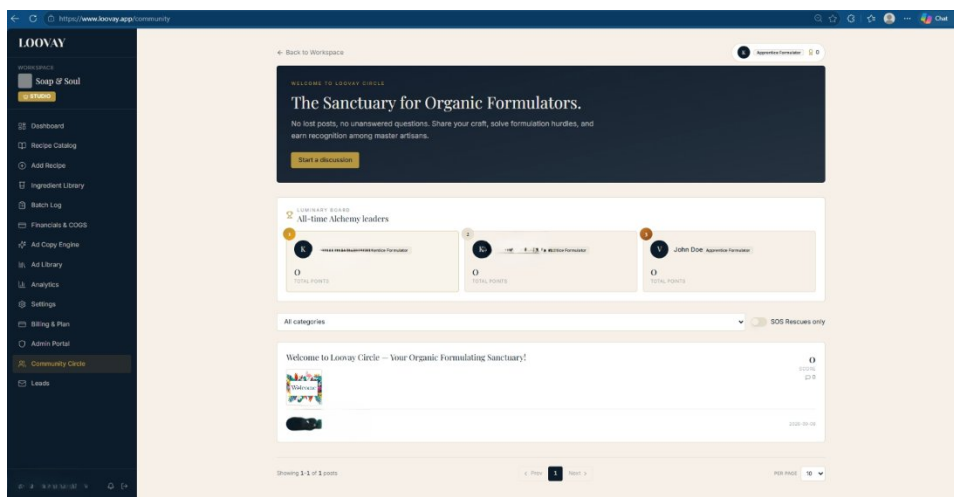
“None of my friends or family understand formulating, supplier headaches, or batch failures. When something goes wrong, I feel like I'm completely on an island.”

What Loovay does about it

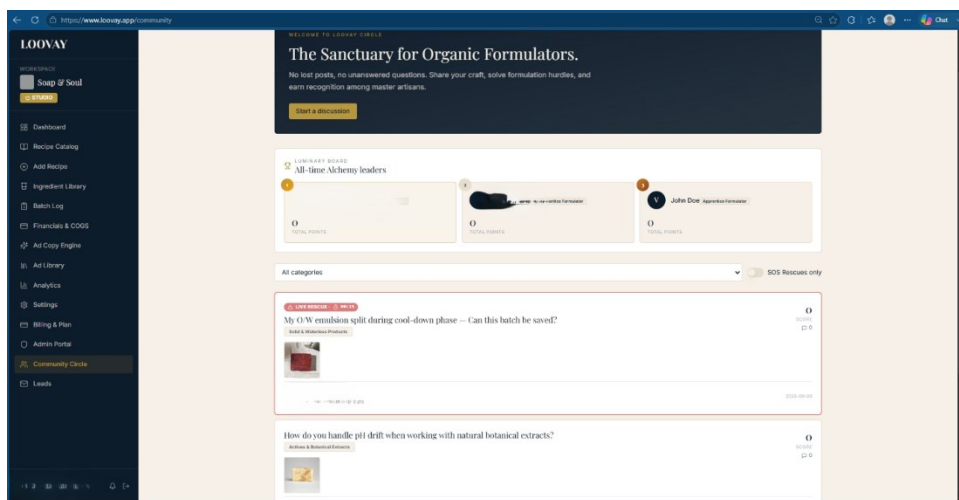
Loovay Circle is a peer network built specifically for formulators — structured Q&A, real-time batch troubleshooting, and a reputation system that surfaces the people who actually know what they're talking about.

Finding your way around

Click Community Circle in the left sidebar to reach the dashboard: leaderboard rankings, active discussion threads, and a category filter. Searching or tagging a thread uses a live auto-suggest box — type a keyword like "preservative" or "pH drift" and matching topics surface instantly across a taxonomy of 15 categories, from Emulsions & Lotions to Regulatory & INCI Standards.



The Community Hub dashboard — the Luminary Board leaderboard, an SOS-Rescues-only toggle, and the active discussion feed.

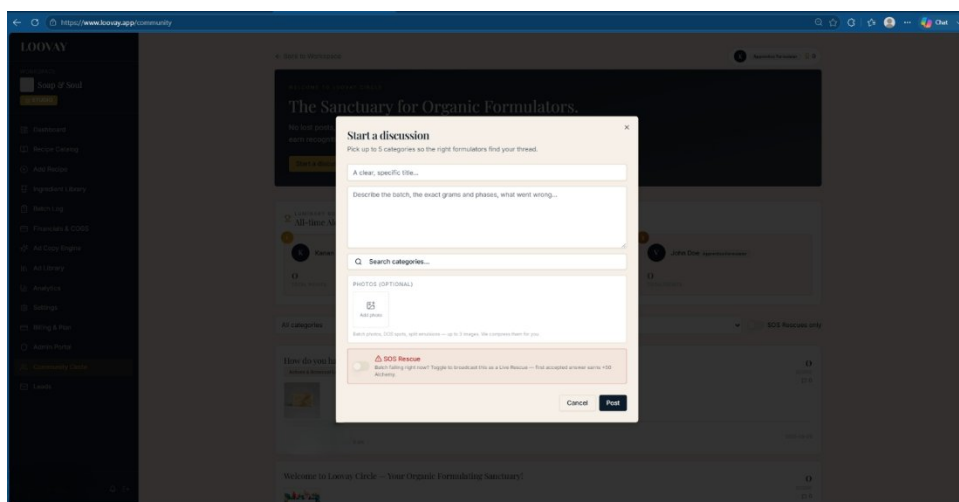


The discussion feed, with an active SOS Rescue thread flagged red and pinned above regular posts.

Posting a discussion

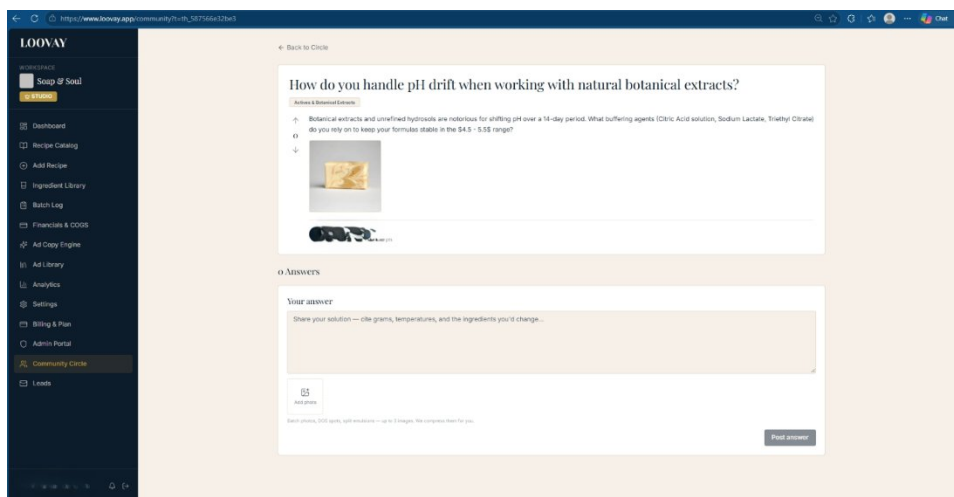
- Click Start a Discussion and give it a specific title — "My O/W emulsion split during cool-down — can this batch be saved?" beats a vague one.
- Describe your recipe's grams, phases, temperatures, and exactly where it went wrong.
- Tag up to five relevant categories.
- Attach batch or product photos for visual context.

As you type your title, a duplicate-prevention panel checks it against already-solved threads in real time, so you often get an answer before you even post.



Starting a discussion — title, description, category tags, and optional photos.

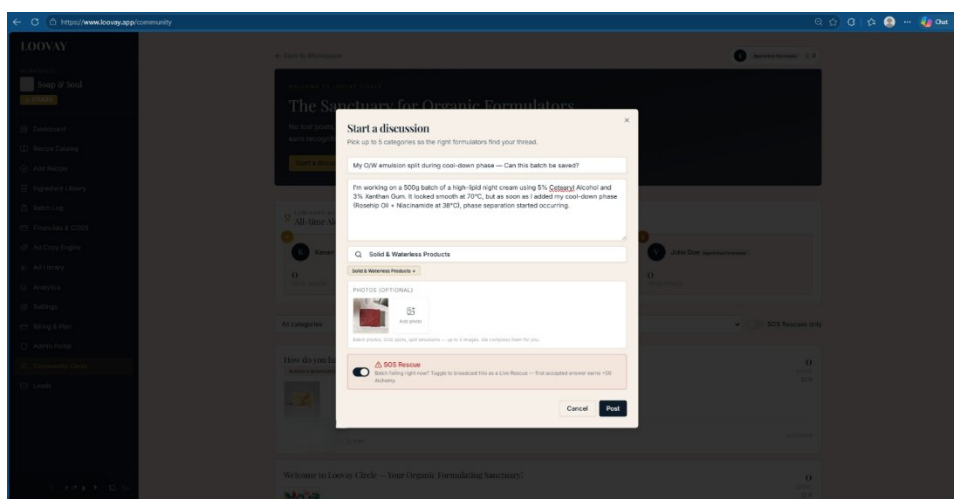
Once posted, the thread opens with your question, any attached photo, and an upvote/downvote rail on the left — with an answer box waiting at the bottom for the first formulator who has a fix.



An open discussion thread — question, batch photo, and the answer box where the next formulator responds.

The SOS Rescue system

A batch actively seizing, ricing, or separating on the bench can't wait hours for a forum reply. Toggle SOS Rescue at the bottom of the discussion form, describe the failure, and publish — the thread renders with a glowing, high-contrast LIVE RESCUE badge and a live timer counting up from the moment it was triggered.



An active SOS Rescue thread — pulsing badge, live timer, broadcast across the community feed.

Reputation, tiers, and badges

Total Alchemy Score = upvotes + accepted answers + SOS rescues - downvotes.

Action	Points
Your answer is upvoted	+10
Your answer is marked accepted	+15

Action	Points
Your answer resolves an SOS Rescue	+50
Your question is upvoted	+5
Your content is downvoted	-2

Tier	Points
Apprentice Formulator	0 – 99
Botanical Artisan	100 – 499
Master Emulsifier	500 – 1,999
Grand Alchemist	2,000 – 4,999
Legendary Chemist	5,000+

- First Responder — answers an SOS thread within 15 minutes of posting.
- Preservation Guardian — 5 accepted answers under Preservation & Microbiology.
- Circle Luminary — top 3 point earners platform-wide for the month.

Quick Reference

Physical property targets

Property	Target range
Hardness	29 – 54
Cleansing	12 – 22
Conditioning	44 – 69
Bubbly lather	14 – 46
Creamy lather	16 – 48
Iodine value	41 – 70
INS score	136 – 165

Key constants

- $\text{KOH} \div \text{NaOH}$ molar mass ratio: $56.105 \div 39.997 \approx 1.40275$
- Pure NaOH minimum water-to-lye ratio for full dissolution at room temperature: 0.9:1 (engine flags below 1.1:1 as a solubility risk)
- Allergen disclosure threshold, rinse-off products: 0.01% (100 ppm)
- Allergen disclosure threshold, leave-on products: 0.001% (10 ppm)

Curing and QC targets

Check	Target
Pre-cure pH	10.0 – 11.5
Post-cure pH	8.5 – 9.5
Cure complete threshold	Weekly moisture loss under 0.5%
Standard CP cure window	4 – 6 weeks
Yield efficiency floor to investigate	Below 92%

Glossary

- SAP value — the amount of alkali (g) required to fully saponify 1 g of a given lipid.
- Superfat / lye discount — the percentage of oil left deliberately unreacted with alkali.

- Trace — the point at which the soap batter thickens enough to hold a temporary pattern on the surface.
- INS score — SAP value minus iodine value; a general indicator of overall bar balance.
- INCI — International Nomenclature of Cosmetic Ingredients; the standardized naming system used on ingredient labels worldwide.
- Pre- vs. post-saponified labeling — listing raw starting oils and lye versus listing the soap salts and glycerin actually formed by the reaction.