
Flavor Matching Project Brief — Sample Submission Checklist

Purpose: Use this checklist to prepare product samples for Ruikelai Global's flavor-matching and reverse-engineering service. Correct sampling and documentation speed analysis, reduce repeat shipments, and improve accuracy of the match.

Quick summary (printable one-page)

- **Sample type:** Solid / Powder / Liquid / Semi-solid / Oil / Emulsion
 - **Quantity (recommended):** Solids/Powders/Seasonings: **250–500 g**; Liquids/Sauces/Drinks/Oils: **250–500 mL**; Baked goods (muffins, bread): **4–8 whole pieces**; Concentrates/essences: **50–100 mL**.
 - **Temperature for shipping:** Ambient OK for shelf-stable; **cold chain (4°C)** for perishable/fresh or refrigerated items; **frozen (-18°C)** for frozen products.
 - **Documentation required:** Product name, lot number, production date / best-by, full ingredient list, target sensory brief, processing conditions (if available), contact person.
 - **Label each sample** with a unique Sample ID (e.g., RUIK-2025-001).
 - **Secure packaging** to avoid contamination/leakage.
 - **Chain-of-custody form** signed and included.
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Before you pack — what we need from you

1. Contact & Project Info

2. Company name, project contact (name, email, phone)
3. Preferred NDA or reference to an existing NDA (attach if required)
4. Project priority (Standard / Expedited)

5. Product identity & documentation

6. Product name (commercial name) and SKU
7. Production/lot number
8. Date manufactured & Best-By / Use-By date
9. Full ingredient declaration (as on the label) and spec sheets if available
10. Nutrition panel (if available)
11. Allergen declaration

12. Country/market of sale (regulatory context)
 13. **Processing & matrix details** (as much as you can provide)
 14. Basic recipe or composition (if accessible): fat %, sugar %, salt %, moisture/water activity (aw), pH
 15. Critical processing parameters: bake time/temp, pasteurization, roasting temp & time, extrusion conditions, homogenization, etc.
 16. Packaging format (tray, pouch, jar), headspace (air/N₂), typical storage temp
 17. **Target objectives & constraints**
 18. Why match this product? (benchmark/private-label/supply-chain rescue/cost reduction)
 19. Acceptance criteria (sensory targets, analytical tolerances)
 20. Clean-label or ingredient constraints (e.g., “no artificial flavors”, allergen limits)
 21. Any cost or supplier constraints (preferred raw-material specs, target cost per kg)
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Sample quantity & format (recommended)

- **Seasonings / Dry powders / Snack coatings:** 250–500 g in sealed, food-grade bags or jars.
 - **Liquid sauces / beverages / oils:** 250–500 mL in sealed bottles (amber glass preferred for light-sensitive liquids).
 - **Baked goods / confections:** 4–8 pieces per product (keep in original packaging if possible).
 - **High-value concentrates / extracts:** 20–100 mL (label concentration / ingredient grade).
 - **Multiple lots:** If possible, include 2 separate production lots (if instability suspected or variability is a concern).
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Packaging & shipping instructions

- Use **food-grade, leakproof inner containers** (vacuum bags, sealed jars, screw top bottles).
 - Place inner containers inside a protective secondary packaging (zip bag → bubble wrap → corrugated box).
 - For chilled/fresh items, use gel packs and ship **overnight / cold chain**. For frozen, ship on dry ice or frozen gel. Label shipment with temperature requirement.
 - **Label each container clearly** with:
 - Unique Sample ID (e.g., RUIK-2025-001) — visible on both inner & outer packaging
 - Product name / SKU
 - Lot/Batch number
 - Production date & Best-By date
 - Include **packing list & chain-of-custody form** inside the box (printed).
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Sample label template (example)

Sample ID: RUIK-2025-001
Product name: Tropical Mango Yogurt Smoothie
SKU: TGYS-100
Lot #: L-3490
Prod Date: 2025-07-22
Best By: 2025-09-22
Storage: Keep refrigerated (2-4°C)
Contact: Eric Zhao, info@ruikelaiglobal.com, +8615898887876

Chain-of-Custody / Submission Form (include one per shipment)

- Sender company & contact
- Date shipped / courier & tracking number
- Number of samples enclosed & Sample IDs
- Signature of sender & date (digital acceptable)
- Any deviation/notes (e.g., temperature excursions)

Analytical & sensory tests — choose priority options

(We will run a standard set; tick additional items you want.)

Standard (included)

- GC-MS headspace screening (volatile fingerprint)
- Headspace quantitative profile (semi-quantitative markers)
- Sensory difference testing (trained panel)
- Descriptive sensory notes (internal panel)

Optional / Add-on (tick if requested)

- Full GC-MS quantitation with internal standards ☐
- LC-MS analysis (non-volatiles, off-flavors, pigments) ☐
- GC-O (olfactometry) for key aroma impact compounds ☐
- Microbial testing (if safety or spoilage suspected) ☐
- Water activity (aw), pH, moisture content ☐
- Accelerated stability (shelf-life simulation) ☐
- Cost-engineering & alternative raw-material formula ☐
- Scale-up / pilot run support ☐

Shipping & contact (example)

Ship to (Ruikelai Technical Lab) \ Ruikelai — Technical Services \ ATTN: Flavor Matching Lab (Receiving) \ [No. 277, Chongqing Road, Economic Development Zone, Pingdu City] \ [Qingdao City, Shandong Province, 266700] \ [China] \ Phone: +8615898887876 \ Email for shipping notices: info@ruikelaiglobal.com

Important: Email tracking number and expected delivery date to info@ruikelaiglobal.com and your technical contact.

Safety & regulatory notes

- Do not ship hazardous materials (flammable solvents, concentrated acids/bases) unless pre-arranged.
 - If sample contains allergens or controlled ingredients, declare them clearly on paperwork.
 - For international shipments, include full customs documentation and list contents as “Food sample for analysis — not for resale.”
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Confidentiality & IP

- We operate under strict confidentiality. We will sign your NDA on request — please attach a signed NDA to this shipment if required.
 - Our scope: technical analysis & formulation support. We do **not** assist in activities that would intentionally infringe third-party IP or facilitate illegal conduct. Projects are scoped and executed under agreed terms.
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What you will receive (deliverables)

- Initial Technical Brief (within initial analysis turnaround window): GC-MS headspace summary, chromatograms, and preliminary markers.
 - Sensory Comparison Report: trained panel notes, difference testing results.
 - Initial Formulation Sample: suggested formulation and in-matrix sample (if feasible).
 - Final Deliverable (on approval): production-ready formula/spec sheet, raw material sourcing options, processing notes, and recommended shelf-life guidance.
 - Optional: stability report, manufacturing scale-up notes, cost-reduction variant.
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Typical turnaround times (guideline)

- **Initial receipt & sample intake:** 1–2 business days after delivery confirmation
- **Initial analytical report (GC-MS screening): 5–10 business days** from sample intake (matrix dependent)

- **Initial formulation & internal sensory:** additional **7–14 business days** after analytical report (depends on complexity)
 - **Iterative cycles:** typically **3–7 business days** per iteration (based on feedback & requested changes) \ (*Expedited services available for an additional fee; timelines are contingent on matrix, test selection, and shipping speed.*)
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Pricing & quotes

- Projects are quoted per scope. A basic analysis + initial match (standard matrix) typically starts at a fixed fee; complex matrices (high fat, emulsions, phytochemicals) or additional analytics (GC-O, LC-MS) are billed as add-ons. Request a quotation when you submit the sample.
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Frequently asked submission tips

- **Send the freshest available sample** of the product to reduce artifacts from storage.
 - **If product is old/near best-by**, note this — it may affect volatile profiles.
 - **If multiple SKUs or flavours** are to be matched, send each SKU in a separate, clearly labeled container.
 - **If you can't provide a full ingredient list**, tell us what you can — even tentative supplier names or known functional ingredients help our flavorists interpret data.
 - **Photos:** include photos of product packaging, ingredient label, and the powdered/solid product in a bowl to help visual matching.
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Example “One-Page Checklist” (for print)

- ☐ Sample packed & labeled with Sample ID
- ☐ Chain-of-custody form included & signed
- ☐ Ingredient list & nutrition panel included (if available)
- ☐ Production lot & dates documented
- ☐ Sample quantity meets recommended range
- ☐ Storage/shipping temp instructions included
- ☐ NDA attached (if required)
- ☐ Courier tracking emailed to lab-intake@ruikelaiglobal.com
- ☐ Tests requested (tick): GC-MS ☐ GC-O ☐ LC-MS ☐ Microbial ☐ Stability ☐