



## Unit 3: Preparation of Medicated Oils (Thailams)

# PAPER 7 — Herbal Preparations & Oils

## Unit 3: Preparation of Medicated Oils (Thailams)

(Snehapāka methods • Signature thailams • Cooling vs warming • Storage & QC • Hygiene & safety)

### Traditional oil preparation methods (Snehapāka) -

**What a thailam is.** A medicated oil is produced by cooking a **base oil (sneha)** with a **herbal paste (kalka)** and a **herbal liquid (drava: decoction, milk, buttermilk, etc.)** until the liquid is driven off and the actives transfer into the oil. This is **snehapāka**.

**Core ratios (starting guidance, then refine by “signs of readiness”).**

- A common working ratio is **kalka : sneha : drava = 1 : 4 : 16** by weight/volume.
- For lighter leaves/flowers, drava can extend to **1 : 4 : 32**; for dense roots/resins, drava can be slightly reduced.

**Stages of cooking (pāka bheda).**

- **Mṛdu-pāka** (soft cook): oil is infused yet mild; suitable for **head/face** or highly sensitive tissues.
- **Madhyama-pāka** (medium cook): the clinical **workhorse**; oil is fully medicated, stable for storage.
- **Khara-pāka** (hard cook): paste darkens and becomes brittle; used rarely (plasters/ointments), **not** for massage.

**Siddhi-lakṣaṇas (readiness signs) to stop the cook.**

- **Sound & steam:** bubbling (from water) subsides; gentle oil hiss only.
- **Aroma & color:** characteristic plant aroma over base oil; color deepens uniformly.
- **Kalka test:** a pinch of paste rolled into a wick **does not stick to fingers** and **cracks lightly** between them; no watery squeeze-out.
- **Water test:** a drop of hot oil in water should **stay coherent**, not disperse with a crackle.
- **String/slip:** a drop between fingers shows **silky “rope”** slip without grittiness.

**Standardized workflow (repeatable in a training clinic).**

1. **Mise en place**—weigh and record **all** inputs; soak coarse powders to a smooth kalka.
2. **Phase I (marination)**—combine **sneha + kalka** on low heat for 15–30 min to open the oil.
3. **Phase II (reduction)**—add **drava**; simmer with **constant agitation** (avoid sticking) until signs approach **madhyama-pāka**.
4. **Phase III (polish)**—lower heat; stir until all readiness signs align.
5. **Hot filtration**—press through layered muslin while still pourable; **do not** chill then filter (traps water).
6. **Conditioning**—allow fine particles to settle 24–48 h; decant bright oil to **amber glass**.
7. **Release**—QC (organoleptic + moisture check), label, and log **batch master record**.

### Ingredients, process, and benefits of key Thailams -

Formulations vary by lineage. Below are **signature botanicals, process notes, and use-cases** that a practitioner must recognize; use pharmacopeial recipes when compounding.



### Mahanārāyana Tailam — comprehensive Vāta-māmsa-sandhi support

- **Base:** sesame.
- **Signature botanicals:** Bala (*Sida cordifolia*), Aśvagandhā, Rasna, Daśamūla group, Devadāru, Taila-parivartaka aromatics; often finished with **camphor** in small quantity.
- **Process notes:** robust **madhyama-pāka**; aim for a **supple, non-sticky** film—overcooking dulls its glide.
- **Therapeutic profile:** **nourishing, gently warming, analgesic**—posterior-chain tightness, spondylotic aches, peri-articular stiffness, convalescence.
- **Cautions:** warm in temperament; avoid aggressive heat stacking; patch-test reactive skin.

### Koṭṭamcukkādi (Kottamchukkadi) Tailam — decongesting Kapha-āma states

- **Base:** sesame.
- **Signature botanicals:** Kottam (*Saussurea*), Cukku (dry ginger), Vacha (*calamus*), Śigru (*moringa*), Lasuna (*garlic*) and other aromatics.
- **Process notes:** keep **volatile notes** alive—gentle finishing heat; **do not** add high-temperature steps late.
- **Therapeutic profile:** **warming, penetrating, mobilising**—excellent **primer** for cold, puffy limbs, morning stiffness, “damp” osteoarthritic patterns.
- **Cautions:** avoid on **hot/inflamed** joints and sensitive facial/neck skin.

### Dhanvantaram (Dhanwantharam) Tailam — neuromuscular & postpartum mainstay

- **Base:** sesame.
- **Signature botanicals:** Bala, Daśamūla, supportive roots; in many Kerala lineages **milk-processing (kṣīrapāka)** is included to temper heat and enhance nourishment.
- **Process notes:** moderate, **unctuous finish**—aim for a **silk-grip** feel, not slickness.
- **Therapeutic profile:** **Vāta-pacifying, strengthening, restorative**—postnatal care, low-back Vāta, peripheral weakness, general abhyanga.
- **Cautions:** if a **milk step** is used, enforce **hygiene and water-removal** meticulously (see QC).

(Cross-reference: other cooling thailams like **Pinda/Manjiṣṭhādi** and **Kṣīrabala** and other warming thailams like **Mūgaparni/Dhanvantara variants** are mapped in Unit 1 & 2; the same snehapāka logic applies.)

## Cooling vs. warming oils — therapeutic distinctions -

Think in terms of **vīrya (immediate potency)** and **guṇa (qualities)**.

**Warming (uṣṇa) thailams**—sesame-based with pungent/aromatic botanicals (e.g., **Koṭṭamcukkādi**, some batches of **Mahanārāyana**):

- **Use for:** **cold, stiff, puffy** tissues; Kapha-Vāta patterns; pre-movement priming; ring-work around joints.
- **Feel:** increases local circulation, reduces boggy, improves glide-slide.
- **Avoid/limit:** **acute heat, redness, or throbbing pain**; head/neck in irritable Pitta; over chest/abdomen with steam.

**Cooling (śīta) thailams**—coconut- or milk-processed bases, bitters/reds (e.g., **Pinda/Manjiṣṭhādi**, **Kṣīrabala**, **Chandanādi**):

- **Use for:** **hot, reactive** tissues; Pitta overlays; irritable skin; post-heat consolidation.
- **Feel:** calms, reduces burning, preserves lubrication without over-drying.
- **Avoid/limit:** dense Kapha boggy unless paired with brisk-light technique.

**Blending strategy.** For mixed states, **stage** rather than mix: begin with a **brief warming primer** around (not on) the target, follow with a **cooling, even-tempo** regional finish; or vice versa when depletion dominates.



## Storage, shelf life, and quality checks of prepared oils -

### Packaging & storage.

- **Amber glass** with tight caps or pumps; **minimal headspace**; label **oil/base, batch, cook date, pāka stage, preparer**.
- Store **cool, dark, dry** (ideally 15–25 °C); keep **session bottles small** to avoid reheating bulk.

### Shelf life (practical clinic).

- Fresh, unrefined, well-cooked thailams: **6–12 months** post-prep when stored correctly. Cooling, coconut-forward oils tend to **oxidize faster**—use sooner. Discard at the **first** sign of rancidity (“painty” odor, tacky feel, color shift).

### Moisture control & water removal.

- Residual water shortens shelf life and fosters microbial growth. QC every batch:
  - **Hot-drop crackle**: a hot drop in water should **not crackle** (no water).
  - **Karl Fischer or loss-on-drying** (if lab support) target **very low moisture**.
  - **Microscope dip-slide** (optional) for bioburden.
- If in doubt, **re-polish** under gentle heat with constant stirring—**do not** scorch.

### Organoleptic QC (at intake and at every decant).

- **Look**: clear, bright, no stratification/sediment after conditioning.
- **Smell**: clean plant-oil aroma; no rancid/solvent notes.
- **Feel**: expected slip and “rope”; no grittiness (indicates poor filtration).
- **Wick test (kalka memory)**: a thin thread dipped and lit should **burn with steady flame**—excess water fizzes it.

### In-use hygiene.

- Decant with clean utensils; **never double-dip**. Wipe pump tips daily; wash and dry bottles between refills; discard **end-of-day** leftovers from open bowls.

## Hygiene and safety protocols in herbal oil production -

### Facility & equipment.

- Dedicated, cleanable area; **stainless steel** kettles/paddles; calibrated **thermometers**, timers, and balances; **sieves/muslin** reserved for oils only.
- **Zoning**: raw herb handling, wet extraction, hot cook, filtration/decant, storage—**separate** to prevent cross-contamination.

### Personnel & PPE.

- Hair/beard nets, masks, aprons, closed shoes; **no perfumes**; hand hygiene logs; health screening to exclude open lesions/illness on production days.

### Raw material controls.

- Approved suppliers; certificates of **identity & absence of heavy metals/pesticides** where available; visual check for infestation/mold; **sieve and wash** as needed; standardize **particle size** for kalka.

### Process controls.

- **Batch manufacturing record (BMR)** with inputs, ratios, start/stop times, temperatures, stir rates, yield.



- **Deviation log** for any adjustments (e.g., extended reduction due to ambient humidity).
- **In-process tests:** periodic moisture check, aroma/color benchmarks, small-aliquot water test near end-point.

#### Filtration & packaging hygiene.

- Use **boiled-dried** muslin; sanitize funnels/bottles; **hot-fill** when possible; label immediately.
- **Traceability:** each bottle tied to BMR; keep retain samples **6-12 months**.

#### Safety & waste.

- Fire safety (class K extinguishers near hot oil); splash guards; burn first-aid kit.
- Dispose of spent kalka in sealed biodegradable bags; no sink disposal.
- **Allergen control:** flag sesame, coconut, mustard, milk in labels; keep **allergen clean-down** SOPs between different oil runs.

## Summary Tables (LMS quick-reference)

### A) Snehapāka workflow & readiness

Step	What you do	Why it matters	Stop when...
Ratio set	1:4:16 (kalka:sneha:drava)	Enough liquid to transfer actives –	
Marinate	Sneha + kalka, low heat	Opens oil to herbs	Aroma rises, paste loosens
Reduce	Add drava; simmer & stir	Extract & concentrate	Bubbling subsides; uniform color
Polish	Gentle finish	Avoids scorching actives	All <b>siddhi-lakṣaṇas</b> met
Filter hot	Muslin press	Removes water-laden fines	Oil runs bright
Condition	24-48 h settle	Clarity & stability	Clear top layer to decant

### B) Signature thailams at a glance

Thailam	Base	Signature botanicals	Therapeutic use	Cautions
<b>Mahanārāyana</b>	Sesame	Bala, Aśvagandhā, Rasna, Daśamūla, Devadāru	Nourish + ease Vāta, spondylotic aches, peri-articular stiffness	Warm; avoid heat stacking; patch-test
<b>Koṭṭamcukkādi</b>	Sesame	Kottam, dry ginger, Vacha, Moringa, Garlic	Mobilise Kapha-āma; cold, puffy stiffness; primer before movement	Not on hot/inflamed joints; avoid face/neck
<b>Dhanvantaram</b>	Sesame	Bala, Daśamūla; often milk-processed	Vāta pacification, postpartum care, neuromuscular support	Moisture control critical if milk used

### C) Cooling vs. warming selection

Category	Examples	Use for	Avoid/limit
<b>Warming (uṣṇa)</b>	Koṭṭamcukkādi, warm-lean Mahanārāyana	Cold, stiff, puffy; Kapha-Vāta	Acute heat, head/neck in Pitta
<b>Cooling (śīta)</b>	Pinda/Manjiṣṭhādi, Kṣīrabala, Chandanādi	Hot, reactive tissues; Pitta	Dense Kapha boggiess (without primer)

### D) Storage & QC checklist

Item	Standard
Container	Amber glass, minimal headspace, labeled batch/date
Temperature	15-25 °C, dark, dry; small session bottles
Moisture	No crackle; optional lab moisture test low/trace
Organoleptics	Bright color, clean aroma, silky slip
Shelf life	6-12 months practical; discard at rancidity signs



## E) Hygiene & safety SOPs

Domain	Key controls
Facility	Stainless equipment; zoned areas; calibrated tools
People	PPE, hand logs, health screening
Materials	Approved vendors; ID & purity; particle-size control
Process	BMR, temperature/time logs, in-process tests
Packaging	Hot filtration, sanitized bottles, traceable labels
Allergen/safety	Declare sesame/coconut/mustard/milk; fire & burn SOPs

### Key take-aways

1. **Cook to signs, not just time.** Snehapāka succeeds when **madhyama-pāka** signs align—sound, aroma, kalka behavior, and water tests.
2. **Signature thailams have personalities.** Mahanārāyana nourishes and eases; Koṭṭamcukkādi mobilises; Dhanvantaram steadies Vāta—use accordingly.
3. **Match vīrya to tissue.** Warming oils for cold, stiff patterns; cooling oils for hot, reactive states; stage or blend thoughtfully for mixed pictures.
4. **Quality is a habit.** Moisture removal, hot filtration, amber storage, and clean handling **double** the useful life of your oils.
5. **GMP thinking saves skin.** Batch records, PPE, calibrated heat, and allergen labeling turn tradition into **safe, reproducible medicine.**