

Manuka Mud

This quick guide gives you everything you need at a glance when making the formula — tools, containers, ingredient lists, and step-by-step directions. Use it as your working page while you formulate. There's space to check off steps, record notes, and customize your batch if you enjoy experimenting.

For your first batch, you only need the Test Version and the core directions — print those pages and skip the rest until you're ready to scale up or customize. The Full Formula, Minimalist, and Custom Blend tables can be printed later.


After printing, use the notes column to jot adjustments or observations directly onto the directions table — it's designed as your working surface while you formulate.

Difficulty: Moderate

Required Ingredients: 9

Optional Ingredients: 3

Prep time: 30 minutes

 **IMPORTANT:** This quick guide is for formulation only. Before beginning, please **read the full description of the Manuka Mud Treatment Mask** for detailed safety precautions, ingredient explanations, and usage instructions.

Suggested Tools & Equipment

- gloves (optional)
- spray bottle with 70% isopropyl alcohol
- large-capacity scale (5000 g × 0.01 g)
- milligram scale (100 g × 0.001 g)
- 1 heat source (such as a hot plate, water bath, or double boiler)
- digital thermometer
- 3 glass wide-mouth beakers (250 mL)
- 1 glass beaker (~50 mL)
- 1 small beaker to aid pouring (optional)
- tiny glass or ceramic dishes
- 1 stainless-steel lab spatula
- stainless-steel spoons
- flexible silicone scrapers
- aluminum foil
- fine mesh sieve (recommended)
- calibrated pH meter
- medium beaker with deionized water
- Citric Acid Solution (see ***Making a Formula Work***)
- Baking Soda Solution (see ***Making a Formula Work***)
- 3M KCl Storage Solution for pH meter
- lint-free tissue
- 1 medium funnel (optional)
- sanitized, completely dry final container
- labels

Suggested Container

- 1 [Amber Glass Jar with Screw Lid \(1.7 oz / 50 mL\)](#)

Formulation Notes

¹ Substitute for Deionized Water: Chamomile, Rose, or Lavender Hydrosol, or Distilled Water. Hydrosols spoil quickly once opened. Buy only what you'll use and discard any unused portion. Do not use tap water, as it may contain minerals or microbes that can spoil your formula.

² There is no substitute for Xylitol for fighting yeast film.

³ Optional: If omitting Dead Sea Salt, increase the clay by the same amount to maintain texture and total weight.

⁴ Substitute for Sodium Phytate: Sodium Citrate or EDTA (cosmetic grade).

⁵ Substitute for 1,3-Propanediol: Glycerin (heavier, stickier).

⁶ Substitute for Xanthan Gum (Soft): Regular Xanthan Gum (slightly thicker, more gel-like); if omitted, the mixture will be thinner and require stirring before use.

⁷ Substitute for Honey Extract: Raw Manuka honey. It is stickier, less consistent, and introduces natural microbes, so the finished mask should be used within 3 months. Other raw honeys hydrate but offer less antibacterial activity.

⁸ Substitute for Euxyl PE 9010: A broad-spectrum preservative such as Liquid Germall Plus (used at 0.1–0.5%) or Optiphen. Both are effective in a wide range of products. If using a different preservative, always follow the supplier's recommended usage rate and pH requirements.

⁹ Kaolin Clay suits all skin types. Substitutes: Pink Kaolin or Yellow Kaolin for a similarly gentle, non-drying texture.

¹⁰ Optional. If omitting Colloidal Oatmeal, increase clay.

¹¹ Optional. If omitting Niacinamide, increase clay.

¹² Prepare a Citric Acid Solution (25% Citric Acid Solution with 50% Deionized Water) to adjust pH (see ***Making a Formula Work***).

TEST FORMULA

Makes 20 g Manuka Mud Treatment Mask

This version is designed for testing. Making a small batch first lets you check texture, scent, and skin feel before committing to a larger amount. Once you're happy with the results, you can make the larger batch for general use.

Phase	Ingredients	Function	%	Grams
A	Deionized Water ¹	Hydrates	34.18%	6.84
A	Xylitol ²	Breaks yeast film	10.00%	2.00
A	Dead Sea Salt ³	Refreshes	0.50%	0.10
A	Sodium Phytate ⁴	Boosts stability	0.20%	0.04
B	1,3-Propanediol ⁵	Improves spreadability	8.00%	1.60
B	Xanthan Gum - Soft ⁶	Stabilizes texture	0.50%	0.10
B	Manuka Honey Extract ⁷	Conditions	15.00%	3.00
B	Euxyl PE 9010 ⁸	Preserves the formula	1.00%	0.20
C	Kaolin Clay ⁹	Draws out excess oil	25.00%	5.00
C	Colloidal Oatmeal ¹⁰	Soothes	5.00%	1.00
C	Niacinamide ¹¹	Brightens	0.50%	0.10
D	Citric Acid Solution ¹²	Balances pH 5.2-5.5	0.12%	0.02
			100.00%	20.00

FULL FORMULA (Includes Optional Ingredients)

Makes 70 g Manuka Mud Treatment Mask / Fills one 1.7 fl oz (50 mL) jar

Phase	Ingredients	Function	%	Grams
A	Deionized Water ¹	Hydrates	34.18%	23.93
A	Xylitol ²	Breaks yeast film	10.00%	7.00
A	Dead Sea Salt ³	Refreshes	0.50%	0.35
A	Sodium Phytate ⁴	Boosts stability	0.20%	0.14
B	1,3-Propanediol ⁵	Improves spreadability	8.00%	5.60
B	Xanthan Gum - Soft ⁶	Stabilizes texture	0.50%	0.35
B	Manuka Honey Extract ⁷	Conditions	15.00%	10.50
B	Euxyl PE 9010 ⁸	Preserves the formula	1.00%	0.70
C	Kaolin Clay ⁹	Draws out excess oil	25.00%	17.50
C	Colloidal Oatmeal ¹⁰	Soothes	5.00%	3.50
C	Niacinamide ¹¹	Brightens	0.50%	0.35
D	Citric Acid Solution ¹²	Balances pH 5.2–5.5	0.12%	0.08
			100.00%	70.00

MINIMALIST FORMULA (Required Ingredients Only)

Makes 67 g Manuka Mud Treatment Mask / Fills one 1.7 fl oz (50 mL) jar

Choose the minimalist version if you want the core purifying and biofilm-disrupting benefits without the added comfort ingredients. This streamlined formula still breaks down yeast-supporting films, absorbs excess oil, and leaves the skin feeling clean and refreshed. What you lose are the soothing and tone-evening perks from colloidal oatmeal and niacinamide. If you prefer a straightforward, functional clay mask without the extras, this leaner version is the right fit.

Phase	Ingredients	Function	%	Grams
A	Deionized Water ¹	Hydrates	40.18%	26.92
A	Xylitol ²	Breaks yeast film	10.00%	6.70
A	Sodium Phytate ⁴	Boosts stability	0.20%	0.13
B	1,3-Propanediol ⁵	Improves spreadability	8.00%	5.36
B	Xanthan Gum - Soft ⁶	Stabilizes texture	0.50%	0.34
B	Manuka Honey Extract ⁷	Conditions	15.00%	10.05
B	Euxyl PE 9010 ⁸	Preserves the formula	1.00%	0.67
C	Kaolin Clay ⁹	Draws out excess oil	25.00%	16.75
D	Citric Acid Solution ¹²	Balances pH 5.2–5.5	0.12%	0.08
			100.00%	67.00

How to Use the Custom Blend Table

This table is provided to help you customize your blend. Only fill it out if you enjoy experimenting and feel comfortable working with percentages. The full formula above is already balanced and ready to use.

You may choose any batch size you like. Percentages always stay the same; only the grams change. Enter the percentage you want for each ingredient and adjust the values until your total reaches 100%. Then calculate the grams so they add up to your chosen batch size. Add the % column to ensure it equals 100%, and add the grams column to ensure it equals your batch size. Items shown in bold are required components of the formula.

Some percentages are already filled in for you because these ingredients must stay at fixed levels for safety, stability, or performance. Only adjust the blank cells.

This customizable version utilizes a higher minimum water range than the full formula, as it must remain stable even without 1,3-propanediol and across various ingredient combinations.

Examples of the math:

- If you choose a 50 g batch and an ingredient is 7%, multiply: $50 \times 0.07 = 3.5$ g
- If you choose a 200 g batch and an ingredient is 1%, multiply: $200 \times 0.01 = 2$ g
- If you choose a 112 g batch and an ingredient is 0.5%, multiply: $112 \times 0.005 = 0.56$ g

MY CUSTOM BLEND

Manuka Mud Treatment Mask

Phase	Ingredients	Function	%	Grams
A	Deionized Water¹ (remainder)	Hydrates		
A	Xylitol² (8-10%)	Breaks yeast film		
A	Dead Sea Salt ³ (Max 2%)	Refreshes		
A	Sodium Phytate⁴	Stabilizes the formula	0.20%	
B	1,3-Propanediol⁵ (5-8%)	Improves spreadability		
B	Xanthan Gum - Soft⁶ (0.3-1%)	Stabilizes texture		
B	Euxyl PE 9010⁸	Preserves the formula	1.00%	
B	Manuka Honey Extract⁷ (10-20%)	Conditions		
C	Kaolin Clay⁹ (25-35%)	Draws out excess oil		
C	Colloidal Oatmeal ¹⁰ (Max 1%)	Soothes		
C	Niacinamide ¹¹ (Max 2%)	Brightens		
D	Citric Acid Solution¹² (as needed)	Balances pH 5.2-5.5		
			100.00%	

Date:

Formulation Method	Notes	✓
<p>Prepare your workspace and a sanitized, completely dry container. Wash and dry your hands or put on gloves. Spray all tools and equipment with 70% Isopropyl Alcohol and let them air-dry before beginning.</p>		
Phase A: Dissolve Xylitol in Water		
<p>1. Place a clean beaker that holds at least twice the amount of product you plan to make on the large-capacity scale.</p>		
<p>2. Press Tare to show 0.00 g. Use a spoon or small beaker to slowly pour the Deionized Water or Hydrosol into the beaker to reach the target weight. Do not use tap water!</p>		
<p>3. Press Tare. Use a large spoon to gently transfer the Xylitol to the middle of the beaker to reach the target weight. Pour slowly to avoid getting crystals on the side of the beaker.</p>		
<p>4. Place a clean tiny dish on the milligram scale and press Tare to show 0.000 grams.</p>		
<p>5. Optional. Use the flat end of a lab spatula to slowly sprinkle Dead Sea Salt into the dish to reach the target weight. Transfer to the main beaker.</p>		
<p>6. Press Tare. Use the flat end of a lab spatula to slowly sprinkle Sodium Phytate into the dish to reach the target weight. Transfer to the main beaker and stir to completely dissolve all salt crystals. Undissolved grains can create grit in the final mask.</p>		
<p>7. Use a flexible scraper to gently stir. Avoid splashing the liquid on the sides of the beaker.</p>		
<p>8. Place the beaker on a heat-safe surface. Cover the beaker with foil to prevent water loss. Warm the beaker gently to 70–75°C (158–167°F), checking with a thermometer, until the Xylitol is fully dissolved. Periodically scrape down the sides of the beaker to incorporate any crystals. Set the beaker on a dark surface to visually confirm no undissolved crystals remain.</p>		
<p>9. Remove the beaker from the heat and wipe the thermometer with a clean paper towel.</p>		
<p>10. Cover the beaker with foil to prevent water loss. Allow the mixture to cool naturally or place the beaker in a cool water bath or refrigerator on a paper towel or cloth. Monitor until it is at or below 20°C (68°F). Important! Do not add more ingredients until the Phase A mixture is cool! Cooling prevents the honey extract and gum slurry from clumping, separating, or forming crystals.</p>		

Formulation Method	Notes	
Phase B: Make a Slurry		
1. While the Xylitol mixture is cooling, place a clean small glass beaker that holds at least 50 mL on the milligram scale.		
2. Press Tare. Use a spoon to slowly drizzle Propanediol into the small beaker to reach the target weight.		
3. Press Tare. Use the flat end of a lab spatula to slowly sprinkle Xanthan Gum powder into the beaker to reach the target weight. Stir to combine. The mixture may thicken slightly.		
4. Press Tare. Use a spoon to slowly pour Honey Extract into the small beaker to reach the target weight. Avoid coating the sides of the beaker.		
5. Press Tare. Use a small spoon or a disposable pipette to slowly drizzle Euxyl PE 9010 into the beaker a drop at a time to reach the target weight. Measure your preservative carefully—it keeps your products safe to use.		
6. Once all Phase B ingredients are measured, use a lab spatula to stir gently until the mixture is uniform. Set aside.		
Phase C: Sift Powders		
1. Place a clean, dry wide-mouth beaker that holds at least 250 mL on the large-capacity scale.		
2. Press Tare. Use a spoon to scoop Kaolin Clay into the beaker to reach the target weight. Set aside.		
3. Optional. Return the tiny dish to the milligram scale and press Tare. Use the flat end of a lab spatula to slowly sprinkle Colloidal Oatmeal powder into the dish to reach the target weight. Pour into the beaker with the clay.		
4. Optional. Return the tiny dish to the milligram scale and press Tare. Use the flat end of a lab spatula to slowly sprinkle Niacinamide powder into the dish to reach the target weight. Pour into the beaker with the clay.		
5. Sift. (Optional but highly recommended.) Place a 100–120 mesh sieve over another clean, dry wide-mouth beaker. Slowly pass the powder blend through the sieve, a little at a time, using a spoon or flexible scraper to press and scrape gently until all fine particles are collected. Discard any large clumps or grit that remain in the sieve. Set aside.		

Formulation Method	Notes	✓
Combine		
1. Once the Xylitol mixture has cooled to about 20°C (68°F), use a stiff but flexible scraper to scrape the Phase B slurry into the Phase A water mixture. Stir until uniform.		
2. Gradually add the Phase C powders. Use a flexible scraper to stir and mash into the liquid to ensure a smooth, lump-free consistency.		
Phase E: Adjust pH (Target pH: 5.2–5.5)		
1. Prepare Citric Acid Solution and Baking Soda Solution .		
2. Prepare a beaker of Deionized Water for rinsing the probe.		
3. Rinse the pH probe very well with Deionized Water to remove the storage solution.		
4. Measure pH: Gently shake off excess water and touch the outside of the plastic housing to a lint-free tissue. Submerge the probe tip fully into the middle of the beaker, then swirl gently. Wait for the reading to stabilize (30-45 seconds), then record the pH .		
5. Between subsequent readings, after the mask has touched the probe, place the probe under a steady stream of cool running water. Use a soft-bristled brush to gently but thoroughly scrub away all traces of the clay mask from the bulb and the plastic housing. While adding Citric Acid or stirring, rest the clean probe in a beaker of Deionized Water for no more than 2 minutes.		
6. Return the beaker to the scale and press Tare. Slowly add the Citric Acid Solution. Begin by adding about half of the estimated Citric Acid Solution from your formula table. When you get close to your target range, add the Citric Acid Solution one or two drops at a time (1 drop of solution is approximately 0.04-0.05 g).		
7. Immediately stir for 45 seconds .		
8. Repeat pH adjustment steps 4–7 as needed to reach the target pH of 5.2–5.5.		
9. Rest for at least 2 minutes, then test to confirm the pH level is steady.		
10. Fix. If you go below the target, use the Baking Soda Solution, a drop at a time, to gently raise the pH.		
11. Record how much Citric Acid Solution you used. This serves as your reference for future batches, making the process faster and more predictable.		
12. Wipe and rinse the pH probe very well with Deionized Water and store it in 3M KCl storage solution.		

Package	Notes	✓
1. Use a flexible scraper to scrape the finished product into a clean, dry jar.		
2. Wipe the rim, then cap tightly.		
3. Label the container(s) with the product name and a 6-month expiration date.		
4. Store in a cool, dark place away from moisture and sunlight.		
5. Rehydrate as needed: If the mask feels grainy, add 1–4 drops of Deionized Water . Stir and mash gently with a spatula until smooth.		

Cleanup	✓
Tools	
1. Immediately after making the product, wipe down tools with a clean, dry paper towel.	
2. Rinse all tools under warm running water to loosen residue.	
3. Wash with hot, soapy water using a soft sponge or bottle brush.	
4. For stubborn residue, soak tools in warm water with dish soap for 10–15 minutes before scrubbing.	
5. Sanitize tools in a dishwasher if they are dishwasher-safe.	
Workspace	
1. Wipe down counters and scales with a damp cloth.	
2. Sanitize surfaces with 70% isopropyl alcohol (spray or wipes), then allow to air-dry.	
3. Store clean tools in a covered container or drawer to prevent dust and contamination.	