

COSMETIC COOKBOOK

Recipes for Making Cosmetics

Fun chemistry in practice • useful DIY recipes for individuals and whole groups

Quantities for one person • easy scaling for a group of any size



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How the Cookbook Is Organised

Each recipe begins on a new page and is designed to be printed **separately**. The facial toner, serum and Smooth Cream are placed one after another as a simple step-by-step routine. We also recommend reading the additional information at the beginning and end of this cosmetic cookbook. 😊

Before You Start

Practical information for teachers,
instructors and group leaders



How to Use the Cookbook

All recipes give quantities for one person. It therefore does not matter whether the group has 10, 17 or 31 participants: simply multiply the quantity by the number of people. For ingredients that remain on the sides of containers, spoons or pipettes, we recommend adding a small extra amount.



What Age Is It Suitable For?

With supervision, children from around the age of seven can manage the simpler recipes. Recipes involving a water bath, alcohol, concentrated essential oils, preservatives or pH adjustment must always be supervised by an adult. The stated age is only a guide, and the activity should be adapted to the specific group.

Many basic ingredients are also used in food production, but the finished products are not intended to be eaten. Some ingredients are for cosmetic use only. Clearly label all bottles and stock solutions.

The recipes are intended for education and personal use. They are not instructions for the commercial manufacture or sale of cosmetics and are not a substitute for medical care.

Where to Find Ingredients

We deliberately do not name specific online shops. Products and prices change, and every school has different purchasing options. For example, you can enter the following into a search engine:

'DIY hyaluronic acid powder cosmetic ingredient'

'panthenol powder for making cosmetics'

'jojoba oil'

'Sodium Ascorbyl Phosphate SAP cosmetics'

'Cosgard preservative cosmetics'

'DIY cosmetic containers 10 ml, glass bottle'



What to Check Before Buying

Name and INCI: Check that you are buying the required cosmetic ingredient, not a finished product with a similar name. Follow the manufacturer's recommended dosage.

Concentration: Panthenol may be sold as a powder, a liquid or already diluted. Hyaluronic acid is available both as a powder and as a ready-made gel.

Molecular weight: For hyaluronic acid, distinguish between high-, medium- and low-molecular-weight variants.

Date and storage: Do not buy unnecessarily large packs of oils or active ingredients unless you will use them.

Cleanliness and Workstation Organisation

Before starting, wash your hands, the work surface, containers and equipment. Allow everything to dry completely.

Each ingredient should have its own clean spoon, spatula or pipette. Participants must not put their fingers into shared containers or touch the ends of pipettes that come into contact with ingredients.

Do not return a pipette that has touched the finished product to the original ingredient container.

Powders should be weighed and stock solutions prepared by the activity leader or another designated adult.

Prepare an absorbent mat, paper towels and a place for used equipment.

Label every finished product with its name, the date it was made and the participant's name.



A Useful Tip

Watch out for dirty equipment, mixed-up pipettes, spilt hot water and unlabelled bottles. It may also help to assign roles in advance: who measures, who mixes, who checks the pH and who tidies up.

Water Bath

A water bath gently melts butters, waxes and solid oils without direct contact with the hotplate. Recipes refer to it with the words 'see Water Bath'.

1. Pour a few centimetres of water into a larger saucepan and heat it. The water does not need to boil vigorously.
2. Place a smaller heatproof container holding the ingredients in the water. The container must stand securely and no water may enter it.
3. Stir the mixture slowly and heat it only until the butter or wax has melted.



4. An adult should remove the container using an oven glove or tongs. Take care with hot steam, glass and spilt water.
5. Allow the workstation to cool after heating before tidying it away.



Beware of Burns

Children and younger pupils must not carry the saucepan, hot water or a heated container themselves. Never make alcohol-based perfumes near a flame, candle or hotplate.

Adjusting pH and Using Separate Pipettes

Adjust the pH only in water-based products where the recipe says to do so. Prepare a weak citric acid solution in advance to lower the pH and a separate baking soda solution to raise it. Each solution must have its own labelled pipette.

Always add only one drop at a time. Mix the product thoroughly after every drop.

Measure the pH again and continue only if necessary.

Never put concentrated acid or baking soda powder straight into the finished product.



Instructions for preparing baking soda and citric acid solutions are in the section [How to Prepare Active Ingredients and Other Substances](#) on page 36.

Essential Oils Are Optional

A fragrance can be pleasant, but it is not necessary for the recipe to work. Essential oils are concentrated, do not dissolve in water and may cause irritation. A fragrance-free version is often best for children, sensitive skin, allergies, asthma or pregnancy.

For citrus oils used on the skin, check the phototoxicity and the supplier's recommended limit.

Cinnamon, clove, oregano, mint or eucalyptus can be very strong and irritating; it is better to omit them for young children and sensitive skin.

Fragrance blends for diffusers are not automatically suitable for use on the skin.



Reusing Containers

1. Remove any product residue and wash the container with warm water and washing-up liquid.
2. Rinse it several times with clean water. Repeat the process for greasy containers.
3. Depending on the material, you can finish cleaning it with alcohol. Then allow it to dry completely.
4. Check that the container is not cracked, rusty or damaged. Do not reuse a damaged container.

5. Remove the old label or cover it with a new one. Always include the product name and date of manufacture.

If you are unsure which ingredient to choose, write to zaneta@greenscan.cz



A Good Container

Start with a **smaller container** and check whether the product suits you or needs adjusting. If it works, make more next time. We prefer smaller, fresher batches 😊.

Useful Recipe Supplements

How to Prepare Hyaluronic Acid, Panthenol, Vitamin C and Other Solutions

Participants may add powdered vitamin C, panthenol or other ingredients directly. This requires enough accurate scales, ideally reading to two or three decimal places.

Stock solutions are usually more practical, especially for hyaluronic acid, which needs time to absorb water and form a gel. Prepare it several hours ahead, ideally about 24 hours.

Participants may prepare the baking soda and citric acid solutions used to adjust pH. One of each usually serves a group of about five.

Full instructions: [Preparing Active Ingredients and Other Substances, page 39.](#)

Which Oils to Use?

See **Which Oil to Choose** on page 41 for oils, their properties and suitable skin types. Print this section when choosing ingredients for creams, serums or make-up removers.

Which Scents to Use in Perfume and Diffusers?

Also see **Scents and Fragrance Combinations**. Print it for spray perfume, roll-on perfume or home/car diffusers. It helps participants choose compatible scents and create their own blend.



Scaling for a Group and Basic Terms

How to Prepare the Right Amount for Any Class Size



Basic Formula

Amount for the group = amount for one person × number of people. Add approximately 5–10% extra, depending on the type of ingredient.

Example: the recipe gives 2 ml of oil per person. For 31 people, you need $2 \times 31 = 62$ ml. With an extra ten per cent, prepare approximately 68 ml.

Drop size varies between droppers. For larger groups, do not count out tens or hundreds of drops. Prepare the fragrance blend in millilitres or grams and use an accurate pipette or scale.

For expensive active ingredients, an extra 5% may be enough. For thick butters, waxes and gels, an extra 10% is more practical because some remains on containers and equipment.

Quick Extra-Allowance Table

Number of people	No extra	+ 5%	+ 10%
10	10 portions	10.5 portions	11 portions
15	15 portions	15.8 portions	16.5 portions
20	20 portions	21 portions	22 portions
25	25 portions	26.2 portions	27.5 portions
31	31 portions	32.6 portions	34.1 portions
40	40 portions	42 portions	44 portions
50	50 portions	52.5 portions	55 portions

Basic Terms

Active ingredient: An ingredient added for a specific cosmetic effect, such as niacinamide, panthenol or hyaluronic acid.

Hydrosol / floral water: A water-based product obtained by distilling plants, containing active substances. It provides a more fragrant alternative to distilled water, but it is still a water-based ingredient that needs preservation.

Stock solution: A solution of known concentration prepared in advance. It makes it easier to measure small amounts of powder accurately.

Water phase: The part of the recipe consisting of water, hydrosol and water-soluble ingredients.

Oil phase: The part consisting of oils, butters and waxes.

Anhydrous product: A product without water, such as a balm, oil serum or roll-on.

Preservative: Protects a water-based product against the growth of bacteria, yeasts and moulds. Use the amount recommended by the manufacturer and ensure a suitable pH.

Antioxidant: Slows oils from becoming rancid. Neither vitamin E nor rosemary antioxidant replaces a preservative.

Solubiliser: Helps disperse a small amount of oil or fragrance in water. Salt, glycerine and a small amount of alcohol do not automatically replace it.

pH: A measure of the acidity or alkalinity of a water-based product. Follow the target range for each recipe and adjust it drop by drop.

INCI: The international name of a cosmetic ingredient. It helps you check exactly what you are buying.



1. DIY Rose Water Two-Phase Remover

Gentle Cleansing in Three Steps

Two phases, one bottle, done. Rose water refreshes and oil dissolves make-up, SPF and oily dirt. Shake to combine briefly. The first step in a simple routine: remover, toner, serum and cream.

Amount	Time	Difficulty	Age
10 ml	10 - 40 minutes	easy	10+ with supervision

What You Need

clean 10 ml bottle
 pipette or syringe
 small cup or scale
 label and pen

Ingredients for One Person

Ingredient	Amount per person
Rose water, another hydrosol or distilled water	4.4 ml
Plant oil for your skin type	5.4 ml
Cosgard or preservative	0.1 ml; follow supplier
Vitamin E, optional	1 drop; reduce oil



CG tip

Oil-only option: mix oils you have, such as olive and sunflower.
 No preservative needed 😊

What Each Ingredient Does

Hydrosol: creates the water phase, refreshes and may smell gently of the plant. Unlike distilled water, genuine hydrosol contains small amounts of plant compounds.

Plant oil: dissolves oily dirt, SPF and make-up. Grape-seed or jojoba oil suits most skin types; see the appendix for more.

Cosgard: preserves water-based products. Follow the supplier's dosage and pH guidance.

Vitamin E: slows oil oxidation but is not a preservative.

Method

1. Measure the hydrosol into the bottle.
2. Add the preservative and mix.
3. Add the plant oil and optional vitamin E.
4. Close, label and shake well.

How to Use

Shake before use.

Apply to a clean cotton pad or palms and wipe the skin gently.

Keep out of the eyes. Rinse afterwards if you wish.



GG tip

Soak a reusable cotton pad in hot water for effective, pleasant and soothing cleansing.

Storage and Shelf Life

With a preservative, keep cool and dark and use within about 2–3 months.

Without one, make a single-use amount or refrigerate and use within 1–3 days.

Discard it if the scent, colour or appearance changes.

Safety

Patch-test a small amount before first use.

If it stings around the eyes, rinse immediately and do not use it there.

For nut allergies, choose jojoba, grape-seed or another suitable oil.



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2. DIY Facial Toner – a Fresh Boost

A Fresh Boost after Cleansing

A toner is not just scented water. This light version refreshes the skin, adds hydration and prepares it for serum or cream. It contains SAP, a more stable form of vitamin C, hyaluronic acid and a little glycerine. This time, we will also play at being a small laboratory: the correct pH and preservation are important.

Amount 10 ml	Time 15 - 50 minutes	Difficulty medium	Age 12+ with supervision
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What You Need

clean 10 ml bottle with a spray or dropper top
 pipettes or small syringes
 pH paper covering approximately pH 4–7
 small container for a test sample
 label and pen



Ingredients for One Person

Ingredient	Amount per person
Rose water or another hydrosol	approximately 8 ml
10% SAP solution – Sodium Ascorbyl Phosphate	0.6 ml
1% hyaluronic acid (HA) gel	0.8–1 ml
Glycerine	0.3 ml
Cosgard or preservative	0.1 ml (approx. 2–3 drops); follow the supplier's instructions

What Each Ingredient Does

Rose water / hydrosol: forms the water base, refreshes and provides a delicate scent.

SAP: a water-soluble vitamin C derivative used as an antioxidant in cosmetics. It works best at a relatively neutral pH of around 6–7.

Hyaluronic acid: binds water and improves the feeling of hydration. The recipe uses a pre-prepared 1% gel; instructions are in the chapter How to Prepare Active Ingredients.

Glycerine: a humectant that helps retain water. A higher amount may feel sticky.

Preservative: protects a water-based product against microbial spoilage.

**GG tip**

The toner, serum and cream are arranged in sequence. The toner supplies water, the serum provides active ingredients, and the cream helps reduce water loss through evaporation.

Method

1. Measure approximately three quarters of the hydrosol into the bottle.
2. Add the 10% SAP solution, hyaluronic acid gel and glycerine.
3. Add the preservative according to the supplier's dosage instructions and mix.
4. Top up with hydrosol to a total of 10 ml.
5. Measure the pH. Aim for approximately 6.0–6.5.
 - When measuring, the pH paper should not touch the sides of the glass.
 - Do not spray the toner onto it. It is best to dip the pH paper directly into the prepared toner.
6. If necessary, adjust the pH one drop at a time with a 5% citric acid or baking soda solution. Mix and measure again after each drop. *How? See page 41 – How to Prepare Active Ingredients and Other Substances.*

How to Use

Spray 2–4 times into clean palms or onto the skin; close your eyes when spraying.

Use after cleansing and before serum or cream.

If it feels too sticky, use less glycerine or less HA next time. The sticky feeling usually disappears within half a minute 😊.

Storage and Shelf Life

Store in a cool, dark place away from direct sunlight.

With a suitable preservative, use within approximately 2–3 months; the exact shelf life depends on the ingredients and hygiene.

Without a preservative, use the toner within approximately 3 days and ideally store it in the fridge. P.S. It may last longer, but I prefer to state a shorter time so that you do not come and break my window if the toner goes off. 😊

Safety

Do not add an essential oil to a water-based toner without a solubiliser.

If the product causes burning, significant redness or itching, wash it off and stop using it.

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3. Nourishing 'Anti-Ageing' Facial Serum

Hydration, Nourishment and No Promises of Eternal Youth

No serum can stop time – unfortunately. It can, however, help the skin look more hydrated, softer and happier. This is a two-phase version: the water phase supplies active ingredients and the oil phase provides nourishment. Before each **use, shake it thoroughly**.

Amount	Time	Difficulty	Age
10 ml	20 - 60 minutes	medium	12+ with supervision

What You Need

clean 10 ml bottle, for example with a dropper
 pipettes or syringes
 pH paper
 small container for a test sample
 label and pen



Ingredients for One Person

Ingredient	Amount per person
Rose water or another hydrosol	Approx. 2 ml
1% hyaluronic acid gel	2 ml
Plant oil or oil blend suited to your skin	1–2 ml
10% panthenol solution (provitamin B5)	1.5 ml
10% niacinamide solution (vitamin B3)	2 ml
Glycerine	0.3 ml
Cosgard or preservative	0.1 ml; approx. 2–3 drops; follow the supplier's instructions

What Each Ingredient Does

Hydrosol: forms a light water base.

Hyaluronic acid: binds water and improves the feeling of hydration. Different molecular weights behave differently; instructions are provided at the end of the cookbook.

Plant oil: softens the skin and helps reduce water loss. For a versatile version, choose jojoba or grape-seed oil.

Panthenol: provitamin B5 used for its soothing and moisturising effects.

Niacinamide: a form of vitamin B3 used in cosmetics to support the skin barrier and promote a more even-looking complexion.

Glycerine: moisturises, but may feel sticky at higher concentrations.

Preservative: protects the serum's water phase against microorganisms.



GG tip

If the serum feels sticky, use less glycerine or hyaluronic acid next time. But trust me, the feeling usually disappears within half a minute – you can even time it 😊. If the serum is too oily, use less oil and replace the missing amount with floral water.

Method

1. Measure the hydrosol (floral water) into the bottle.
2. Add the panthenol solution, niacinamide solution, hyaluronic acid gel and glycerine.
3. Add the preservative according to the manufacturer's recommendation and mix.
4. Pour in the plant oil.
5. Close the bottle and shake it.
6. Measure the pH of the water phase; aim for approximately 5–6. How? See page 4 – Adjusting the pH.
7. If necessary, adjust the pH drop by drop with a 5% citric acid or baking soda solution.
8. Label the product with its name, optionally the date, and the instruction 'shake before use' 😊.

How to Use

Shake before use.

Apply 2–6 drops to cleansed, slightly damp skin. Adjust the amount to suit your needs.

Use after toner and before cream; depending on how your skin feels, you can also use it on its own.

Storage and Shelf Life

Store in a cool, dark place.

With a suitable preservative, use within approximately 2–3 months.

Without a preservative, prepare only a small amount for 1–3 days and store it in the fridge.

Safety

An essential oil is not needed in a facial serum; we omit it from the school recipe (or you may add just 1 drop of lavender).

Before first use, carry out a patch test on a small area of your forearm.

Use niacinamide and panthenol as pre-prepared, correctly labelled solutions.



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4. Smooth Cream – for Skin That Deserves to Chill

Small but Mighty

This simple cream works for the face, dry hands, elbows and after-shave care. It contains no water, so it does not need a conventional preservative, and it is genuinely easy to make. Apply it to slightly damp skin, where it works best and will not leave you shining like a disco ball.

Amount approx. 15 ml	Time 20 - 40 minutes	Difficulty easy	Age 7+ with supervision
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What You Need

heatproof bowl or beaker
 saucepan or container for a water bath
 clean spoon or spatula
 15 ml jar
 oven glove for an adult
 label and pen



Ingredients for One Person

Ingredient	Amount per person
Shea butter	1 teaspoon; approximately 8 g
Coconut oil	1/2 teaspoon; approximately 4 g
Liquid plant oil suited to your skin	0.5–2 ml
Vitamin E or rosemary antioxidant, optional	1 drop

What Each Ingredient Does

Shea butter: a rich plant fat that softens the skin and forms a protective film.

Coconut oil: improves slip and creates a softer consistency; it may be too rich for some skin types.

Liquid oil: adjusts spreadability and how the product feels on the skin. Jojoba is versatile, grape-seed oil is lighter, and avocado oil is more nourishing. See the overview below.

Vitamin E / rosemary antioxidant: slow the oxidation of oils. They do not protect against bacteria and moulds, but a conventional preservative is usually unnecessary in an anhydrous product.



GG tip

If the cream is too firm, add a little more liquid oil next time. If it is too soft, add a small amount of butter or wax.

Method

1. Prepare a water bath according to the introductory instructions.
2. Place the shea butter and coconut oil in a heatproof container.
3. Allow the ingredients to melt slowly and stir gently.
4. An adult should remove the container. After it has cooled briefly, add the liquid oil and antioxidant (vitamin E). It is fine if you do not have it, but watch the smell and colour because the mixture may become rancid sooner.
5. Pour the mixture into a clean jar and allow it to set at room temperature or briefly in the fridge.
6. Close the jar only once it has cooled completely, and label it with the date, a sticker or a description.

How to Use

Apply a genuinely small amount to slightly damp skin. Alternatively, add a few drops of water or toner to your palm.

Use on the face, dry hands, elbows or as an after-shave balm.

For more hygienic use, scoop it out with a clean spatula.

Storage and Shelf Life

Store in a dry, cool place away from direct sunlight.

Use within approximately 3–6 months, depending on the freshness of the oils.

Do not use the product if it smells rancid, musty or unusual.

Safety

An adult must handle the hot water bath and container.

Do not add an essential oil to the facial version made by a school group.

If you are allergic to a particular plant or nut, use another suitable oil.



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5. DIY 2-in-1 Face Mask and Scrub – a Quick Glow

One Jar, Two Uses

A gentle scrub and a quick mask in one? Absolutely. The mixture helps remove dry flakes, while the oil prevents the skin from feeling completely dried out. Only very finely ground ingredients should be used on the face. Save coarse coffee, salt or large sugar crystals for the body.

Amount approx. 15 ml	Time 20 - 40 minutes	Difficulty easy	Age 7+ with supervision
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What You Need

- small bowl
- clean spoon or spatula
- water bath if the coconut oil is solid
- 15 ml jar with a lid
- label and pen



Ingredients for One Person

Ingredient	Amount per person
Fine cosmetic clay – white, pink or bentonite	1/2 teaspoon
Fine oat or rice flour	1/2 teaspoon
Finely ground lavender powder or more oat flour – for a gentle scrub	1/2 teaspoon
Coconut oil or a blend of coconut and light oil	approximately 1 teaspoon; adjust to the desired consistency
Coffee or sugar – for a coarser scrub	max. 1/4 teaspoon; for the face

What Each Ingredient Does

Clay: helps thicken the mixture and absorbs some skin oil. Different clays vary in fineness.

Oat or rice flour: softens the mixture and creates a very gentle mechanical exfoliant.

Lavender powder: adds a botanical scent and texture; for sensitive skin, you can replace it with oats.

Oil: reduces the drying feeling and helps spread the mixture. See the oil guide in the appendix below. Always use coconut oil, or choose a suitable substitute for it.

Exfoliating powder: mechanically removes surface flakes. The coarser the particles, the greater the risk of irritation.



GG tip

For a body scrub, you can make a coarser version with sugar. I think lavender powder is brilliant . Coffee is great too when used, for example, only once a week. It is simply best to try it and then decide 😊.

Method

1. If the coconut oil is solid, melt it in a water bath. 😊 Beware of scalding.
2. Mix the clay, flour and another fine powder in a clean bowl.
3. Gradually add oil until you have a thick paste resembling wet sand.
4. Transfer to a clean, dry jar. Do not add water to the mixture ❌.
5. Label the jar with the date and the instruction 'use a dry spatula'.

How to Use

Apply a small amount to damp skin after removing make-up.

Massage very gently for 10–20 seconds, avoiding the eye area.

Leave on for 1–5 minutes and rinse off with lukewarm water.

Use no more than approximately 1–2 times a week, depending on how well your skin tolerates it.

Scoop it out with a clean, dry finger, spoon or spatula.

Make sure no water enters the product, as it could quickly begin to grow mould  .

Storage and Shelf Life

Store in a dry, dark place away from water.

Use within approximately 1–2 months.

Never scoop it out with wet fingers or a wet spatula.

Safety

Avoid using coarse coffee, salt or large sugar crystals on the face. Choose finer ingredients instead.

Avoid mechanical exfoliation if you have acne, a damaged skin barrier, eczema or irritation.



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6. DIY Lip Love – Natural Lip Balm

A Balm You Can Mix in No Time

Butter, oil and wax – three basic ingredients that create a balm to soften the lips and protect them from drying out. You can pour it into a jar or a lip-balm tube. For school workshops, a simple version without essential oils is best. And remember: use only ingredients genuinely intended for the lips.

Amount approx. 15 ml	Time 25 - 45 minutes	Difficulty easy	Age 7+ with supervision
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What You Need

heatproof bowl
 water bath
 clean spoon or spatula
 15 ml jar or lip-balm tube
 oven glove for an adult
 label and pen



Ingredients for One Person

Ingredient	Amount per person
Shea or cocoa butter	1 teaspoon; approximately 5 g
Coconut oil	1/3 teaspoon; approximately 2 g
Liquid oil – jojoba, almond, cherry kernel or another oil	2/3 teaspoon; approximately 3–3.5 g
Beeswax or a suitable plant wax	just under 1/2 teaspoon; approximately 3 g
Vitamin E or rosemary antioxidant, optional	1 drop
Colourant suitable for the lips, optional	a small pinch, according to the supplier

What Each Ingredient Does

Butter: softens the lips and gives the balm a creamy texture.

Coconut oil: softens the consistency and improves spreadability.

Liquid oil: provides slip and adjusts how the product feels on the lips. Castor oil adds shine, while jojoba is stable and versatile.

Wax: firms the balm and creates a protective film. Plant waxes may be harder than beeswax, so use them carefully.

Antioxidant: slows oils from becoming rancid.

Colourant: use only a pigment or colourant that the manufacturer specifies as suitable for the lips. For example, mica, iron oxides, beetroot, raspberry pigment and similar options.



GG tip

For a softer balm, use less wax. A stick usually needs slightly more wax than a balm in a jar. First, allow a small test drop to set on a plate.

Method

1. Prepare a water bath. Place the wax, butter and coconut oil in a heatproof container.
2. Heat slowly and stir until everything has melted.
3. An adult should remove the container. Add the liquid oil, antioxidant and, if desired, a lip-safe colourant.
4. Quickly pour the mixture into a jar or lip-balm tube.
5. Allow it to set completely before closing the lid.

How to Use

Apply with a clean finger or directly from the stick as needed.

You can also use the balm on dry cuticles around the nails.

Storage and Shelf Life

Store in a cool, dry place away from sunlight.

Use within approximately 3–6 months.

It may soften in warm conditions; discard it if it smells rancid or changes colour. Try to reuse the container.

Safety

An adult should pour the hot mixture.

Do not add essential oils to a product for children. 'Natural' does not automatically mean safe. For the lips, use no more than a tiny drop of vanilla, or rose wax, which smells lovely, but neither is necessary.

Check for allergies before using almond or another nut oil.



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7. DIY Leave-In Scalp Tonic

Care Begins with the Scalp

This light tonic is applied directly to the roots and does not need to be rinsed out. It helps hydrate the scalp and is also a good excuse for a short massage. Do not expect miraculous hair growth overnight – but regular scalp care does make sense.

Amount 10 ml	Time 20 - 40 minutes	Difficulty medium	Age 12+ with supervision
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What You Need

- clean 10 ml bottle with a dropper or spray top
- pipettes or syringes
- pH paper
- small container for a test sample
- label and pen



Ingredients for One Person

Ingredient	Amount per person
Rose water or another hydrosol	approximately 5.1 ml; top up to 10 ml
1% hyaluronic acid gel	1 ml
10% panthenol solution	1 ml
10% niacinamide solution	2 ml
Glycerine	0.3 ml
Rosemary hydroglycerine extract, optional	0.5 ml or as recommended by the supplier
Cosgard or preservative	0.1 ml; follow supplier

What Each Ingredient Does

- Hydrosol:** forms a light water base without an oily effect.
- Hyaluronic acid:** binds water and improves the feeling of scalp hydration.
- Panthenol:** moisturises and soothes feelings of dryness or tightness.

Niacinamide: supports the skin barrier and promotes a more balanced overall appearance of the scalp.

Glycerine: helps retain water; a higher amount may feel sticky.

Rosemary extract: a plant-derived cosmetic ingredient; its effect and dosage depend on the type of extract, so follow the supplier's instructions.

Preservative: protects the water-based product against microorganisms.



GG tip

Apply the tonic **only to the scalp**, not through the lengths. On fine hair, a larger amount of glycerine or gel may feel sticky.

Method

1. Measure most of the hydrosol into the bottle.
2. Add the panthenol solution, niacinamide solution, hyaluronic acid gel and glycerine.
3. Add the optional rosemary extract and the preservative according to the supplier's instructions.
4. Top up with hydrosol to a total of 10 ml and mix.
5. Take a small sample and measure the pH. Aim for approximately 5–6.
6. If necessary, adjust the pH one drop at a time with a 5% citric acid or baking soda solution.
7. Close the bottle and label it with the name, date and pH.

How to Use

Shake.

Apply a small amount directly to the roots.

Massage gently with your fingertips for 1–2 minutes.

Use as needed, for example 2–5 times a week. Do not rinse 😊

Storage and Shelf Life

Store in a cool, dark place.

With a suitable preservative, use within approximately 2–3 months.

Without a preservative, store for only 1–3 days in the fridge.

Safety

Stop using the product if irritation, itching or burning occurs.

Rosemary essential oil does not replace rosemary extract.

The activity leader should measure the active ingredients and adjust the pH.



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8. DIY Hair Oil Serum

Shine and Softness – One Drop Is Often Enough

This serum is a little oil boost for dry ends and stressed hair. For leave-in use through the lengths, use only one or two drops. A larger amount works well as a pre-wash oil treatment at the roots. Because the recipe contains no water, it does not need a preservative. 😊

Amount	Time	Difficulty	Age
10 ml	10 - 30 minutes	easy	10+ with supervision

What You Need

clean 10 ml bottle with a dropper
 pipettes or syringes
 label and pen



Ingredients for One Person

Ingredient	Amount per person
Jojoba oil	4.5 ml
Grape-seed oil	3 ml
Apricot kernel oil	2 ml
Neem oil	0.5–1 ml
Vitamin E, optional	1 drop
Essential oil, optional for older groups	max. 1 drop; may be omitted

What Each Ingredient Does

Jojoba oil: actually a liquid wax that is relatively stable and suitable for lighter hair care.

Grape-seed oil: a very light oil that adds shine and weighs fine hair down less.

Apricot kernel oil: softens dry, stressed ends.

Neem oil: a strongly scented oil used in scalp care. Only a small amount is included in the recipe.

Vitamin E: an antioxidant that slows the mixture from becoming rancid.

Essential oil: adds fragrance, but is not necessary. Omit it for children and sensitive skin.

**GG tip**

Less is more. One drop is often enough. For very fine hair, omit the neem oil and use more grape-seed oil. Mixing it with water helps distribute it more evenly. 😊

Method

1. Measure all the plant oils one by one into the clean bottle.
2. Add vitamin E and, optionally, one drop of a suitable essential oil.
3. Close the bottle, shake gently and label it with the date.

How to Use

For the ends: rub one drop between your palms with a little water and gently press it into the lengths.

Before washing: massage a small amount into the scalp, leave for 10–30 minutes and wash the hair thoroughly with shampoo.

Always begin with a smaller amount; you can add more at any time.

Storage and Shelf Life

Store in a cool, dark place away from sunlight.

Use within approximately 3–6 months, depending on the freshness of the oils.

Do not use the product if it smells rancid or its scent changes significantly.

Safety

Neem oil may have a very strong scent and can irritate sensitive skin; you can omit it and replace it with jojoba.

Use an essential oil only at a low concentration and according to the supplier's recommendations.

Take care: spilt oil can make floors and surfaces slippery.

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9. DIY Bath Salts with Flowers and Your Own Scent

A Little Wellness Ritual in Just a Few Minutes

Bath salts are simple, attractive and also make a lovely handmade gift. Add dried flowers, herbs, spices and, if desired, a delicate fragrance. For sensitive skin or children, you can let the plants provide the scent on their own. Anyone who does not want to fish flowers out of the bath can put the mixture into a cotton bag as a bath tea.

Amount approx. 100 g	Time 10 - 30 minutes	Difficulty very easy	Age 7+ with supervision
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What You Will Need

- dry bowl
- clean tablespoon
- 100–150 ml jar or paper bag
- optional cotton bath bag
- label and pen



Ingredients for One Person

Ingredient	Amount per person
Epsom, sea, Himalayan or another bath salt	approximately 90–95 g
Baking soda	1 teaspoon; approximately 5 g
Dried flowers or herbs	1–2 teaspoons
Essential oil, optional for older groups only	1–2 drops

What Each Ingredient Does

- Salt:** forms the base of the bath mixture and makes the bath more enjoyable. The different types vary in composition and crystal size.
- Baking soda:** may make the water feel softer and alter the character of the bath.
- Dried flowers:** add visual appeal and a delicate natural scent, but may block the drain or create a mess.
- Essential oil:** is highly concentrated and does not dissolve in water. Use it only when properly dispersed, or omit it entirely.

**GG tip**

A paper bag looks lovely, but fragrance and oil may make it greasy. A jar or securely closing container is more practical for a scented version. And a cotton bag (bath tea) is absolutely brilliant: you can fill it again and again, tie it up and drop it into the bath. The contents infuse like tea and do not make any mess in the bath. 😊 That is my personal recommendation. Žaneta

Method

1. Pour the salt and baking soda into a dry bowl.
2. Add the dried flowers and mix well.
3. For the school and children's version, put the mixture straight into the container without essential oil.
4. **For an older group, the activity leader may add 1–2 drops of a suitable essential oil, first mixed thoroughly into the flowers and salt. Mix the entire blend very well.**
5. Pour into a clean, dry container and label it with instructions for use.

How to Use

Use approximately 2–4 tablespoons of the mixture for one bath. One hundred grams of the mixture is therefore enough for approximately 2–3 baths.

You can place the flowers in a cotton bag as a 'bath tea'; the salt dissolves while the herbs remain inside.

Rinse the bath afterwards and take care on the slippery surface.

Storage and Shelf Life

Store in a completely dry, closed container.

Protect from moisture, otherwise the salt will begin to clump.

Use within approximately 6 months or according to the shelf life of the dried flowers.

Safety

Do not use on irritated or injured skin.

It is better to omit the essential oil for children, during pregnancy, for allergies and for sensitive skin.

Cold-pressed citrus oils may be phototoxic; on the skin, use only a version that the supplier confirms is suitable.

The bath may become slippery after using an oil-based mixture.

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10. DIY Natural Toothpaste

A Small Experiment That Tastes Different from Shop-Bought Toothpaste

Here we will explore in practice what oil, fine powder, clay and xylitol do in toothpaste. Do not expect sweet foam or a typical mint flavour – a homemade mixture is simply different. Treat the recipe mainly as a school experiment and a starting point for discussing ingredients, particle size, hygiene and correct use.

Amount approx. 15 ml	Time 15 - 45 minutes	Difficulty easy	Age 10+; supervised activity
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Important

The mixture is intended for a workshop and occasional trial. Children should use it only with parental consent and adult supervision. Do not swallow it, and stop using it if irritation occurs. A very small amount, approximately the size of a grain of rice, is enough.

What You Need

- dry bowl; water bath if the coconut oil is solid (instructions are provided above in the section Before You Start)
- clean spoon or spatula
- 15 ml jar with a lid
- separate clean spatula for scooping
- label and pen



Ingredients for One Person

Ingredient	Amount per person
Coconut oil	1 teaspoon
Baking soda	1/4 teaspoon; approximately 1–2 g
Fine calcium carbonate intended for oral care	1/2 teaspoon; approximately 3 g

Ingredient	Amount per person
Fine white clay intended for oral care, optional	max. 1/2 teaspoon; adjust to the desired consistency
Food-grade xylitol	1–2 g to taste

What Each Ingredient Does

Coconut oil: forms the base of the paste and helps bind the powdered ingredients.

Baking soda: a mildly alkaline and abrasive ingredient. Use less for sensitive teeth or gums.

Calcium carbonate: a fine mineral abrasive commonly used in toothpastes.

White clay or bentonite: helps create the consistency and adds another fine powdered ingredient.

Xylitol: a sweetener that provides a more pleasant flavour. It does not replace regular dental care.

Essential oil, optional: adds fragrance and flavour, but only a very small amount is needed and it is better omitted for children.



GG tip

The recipe is a good starting point for discussing why a list of ingredients alone is not enough: particle size, abrasiveness, stability, production hygiene and the method of use are also important.

Method

1. Place the coconut oil in a clean bowl. If it is solid, soften it briefly in a water bath.
2. Add the baking soda, calcium carbonate, clay and xylitol.
3. Mix with a clean spatula until a smooth paste forms. Add a little clay or oil to adjust the consistency.
4. If you use an essential oil, add no more than 1 drop (tea tree or mint) and mix thoroughly.
5. Transfer to a clean jar and label it with the name and date of manufacture.

How to Use

Scoop it out only with a clean, dry spatula; never dip a wet toothbrush into the jar. Use a small amount, spit it out and rinse your mouth.



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Do not use it as your main everyday toothpaste. Use it only occasionally, although once you have fine-tuned the recipe so that the toothpaste suits you, you can use it more often 😊.

Storage and Shelf Life

Store in a dry, cool place away from sunlight.

For a homemade school product, we recommend using it within no more than 2–4 weeks.

Discard it if water enters the mixture or its scent or appearance changes.

Safety

Do not swallow. Do not use this recipe for young children; alternatively, use only coconut oil with a little baking soda, calcium carbonate or xylitol. Use an amount the size of a grain of rice or less.

Do not add essential oils, cinnamon or tea tree to the school version; they may irritate the mucous membranes, and safe dosages for oral use are specific.

Consult a dentist if you have sensitive teeth, exposed tooth necks, gum disease or have recently had dental treatment.



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11. Blend Your Own Oil-Based Roll-On Perfume

Your Scent, Your Combination

Making your own roll-on perfume is easier than it looks. All you need is plant oil, a few drops of your chosen fragrance and a roller bottle. The scent is gentler than a spray and is applied only to small areas. It is better to start cautiously – you can always add another drop, but you cannot take one away.

Amount 10 ml	Time Approx. 10 min to 1 hour	Difficulty easy	Age 10+ with supervision
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What You Need

clean 10 ml roll-on bottle
pipette or syringe
label and pen



Ingredients for One Person

Ingredient	Amount per person
Jojoba, grape-seed or fractionated coconut oil	top up to 10 ml; approximately 9.5 ml
Essential oils or a cosmetic fragrance blend	5 drops for a gentle version; max. approximately 10 drops for older teenagers and adults
Vitamin E, optional	1 drop

What Each Ingredient Does

Carrier oil: dilutes the concentrated fragrance and allows safer application to a small area. Jojoba is stable and almost odourless.

Essential oil / fragrance blend: provides the scent. Use only an ingredient intended for leave-on cosmetics and comply with the supplier's limit.

Vitamin E: slows oxidation of the plant oil.

**CG tip**

Begin with one or two scents. Too many ingredients can produce a masterpiece, but just as easily an unexpected insect repellent. **You will find combinations in the appendix below.**

Method

1. Pour most of the carrier oil into the bottle.
2. Add your chosen fragrance blend. For your first attempt, begin with five drops; see below: [Scents and Fragrance Combinations](#).
3. Add vitamin E and top up with carrier oil to 10 ml.
4. **Close, shake and label it (ingredients, date, description, whatever you like 😊).**
5. The fragrance may change slightly over a few days, but you can also use it immediately.

How to Use

Apply a small amount to the wrists or other pulse points, such as the neck.

Do not use on the face, in the eyes, on mucous membranes or on irritated skin.

Before first use, test a small amount on your forearm and observe the reaction for 24 hours.

That is what people say, but who actually does it, right?

Storage and Shelf Life

Store in a cool, dark place.

Use within approximately 3–6 months, depending on the oil used.

Do not use the product if its scent changes or the oil becomes rancid.

Safety

Test on your forearm: apply a little to a small area and wait at least one hour to see whether redness, bumps or a similar reaction appears. If it does, do not use the product.

For children, during pregnancy, and in cases of allergies or asthma, choose the fragrance especially carefully or omit essential oils.

For citrus oils used on the skin, choose a non-phototoxic version (beware of sunlight) or comply with the supplier's limit.

The number of drops is approximate; for an exact concentration, weigh the fragrance or measure it in millilitres.

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12. How to Make Your Own Perfume

Blend an original fragrance that is exactly right for you. It is easy to make, costs less than an ordinary perfume, and you can choose whether the scent will be delicate, fresh, sweet or bold.

Amount 10 ml	Time 10 - 45 minutes	Difficulty medium	Age 15+ with supervision
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Important

Alcohol is flammable. An adult must measure, store and clear it away. Do not make this recipe near a candle, hotplate, heat gun or any other source of heat.

What You Need

- clean 10 ml glass spray bottle
- pipette or syringe
- safety glasses
- label and pen



Ingredients for One Person

Ingredient	Amount per person
Cosmetic alcohol or perfumer’s alcohol	top up to 10 ml; approximately 9–9.5 ml
Essential oils or a cosmetic fragrance blend	5–15 drops; according to the supplier’s limit
Distilled water, optional	max. 0.5–1 ml; may cause cloudiness and soften the fragrance

What Each Ingredient Does

Cosmetic alcohol: dissolves fragrance substances and evaporates quickly.
Fragrance blend: determines the character of the perfume. Be careful: finding the right ratio can be genuinely difficult, and your perfume can easily end up smelling more like insect repellent. **Distilled water:** may soften the feel of the alcohol, but some fragrances become cloudy or separate when water is added.

**GG tip**

The scents blend over several days and may smell different from immediately after mixing. Therefore, always make your first attempt in a small 10 ml bottle.

Method

1. An adult should measure approximately 9 ml of cosmetic alcohol into the bottle.
2. Add 5–10 drops of your chosen fragrance blend and close the bottle.
3. Shake for approximately 20–30 seconds.
4. To add a small amount of water, first test it in a separate mini container. Omit the water if the mixture becomes cloudy.
5. Top up with alcohol to 10 ml and label it with the ingredients, date and flammable symbol.
6. Leave to mature for at least 24 hours, ideally for several days in the dark. Shake before use.

How to Use

It is better to spray it onto clothing from a distance; test it on a hidden area first.

When using it on the skin, apply only a small amount to intact skin.

Do not spray into the face, eyes or mouth, or into the air around other people.

Do not worry: you can smell the alcohol for only about a minute, and it evaporates very quickly after spraying.

Storage and Shelf Life

Keep tightly closed in a cool, dark place away from sources of heat.

Store out of reach of children.

Do not use the product if its scent changes, sediment appears or it looks unusual.

Safety

Alcohol is highly flammable; keep away from naked flames, smoking and sparks.

Use cosmetic alcohol in a school setting. Citrus oils may be phototoxic when used on the skin. When applying to clothing, first test whether they leave stains.

Test on your forearm: apply a little to a small area and wait at least one hour to see whether redness, bumps or a similar reaction appears. If it does, do not use the product.

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13. DIY Diffuser for the Car or Wardrobe

A Small Bottle with a Big Scent

A diffuser can fragrance a car, wardrobe, cupboard or another small space. The cord or wooden cap absorbs the mixture and releases it gradually. When the scent fades, simply turn the bottle upside down for a moment. Take care not to spill it: the mixture may damage plastic, varnished wood or textiles.

Amount 5–10 ml	Time 10–30 min	Difficulty easy	Age 12+ with supervision
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What You Need

- bottle for a hanging diffuser
- pipette or syringe
- spill-protection mat
- label and pen



Ingredients for One Person

Ingredient	Amount per person
IPM – Isopropyl Myristate or fractionated coconut oil (alternatively cosmetic alcohol or a mild-smelling oil such as sunflower, jojoba or grape-seed oil)	8–9 ml, depending on the size of the bottle
Essential oil or fragrance blend	0.5–1 ml; approximately 10–20 drops

What Each Ingredient Does

- IPM:** a synthetically produced ester with almost no scent of its own. It carries fragrance substances well and is less greasy than ordinary plant oil.
- Fractionated coconut oil:** a more stable and less aromatic oil alternative, although it can still leave a greasy stain.
- Fragrance blend:** fragrances the space. A diffuser blend is not automatically safe for use on the skin.



GG tip

A subtle scent is better than a fragrance bomb in a small space or car. Begin with half the amount and increase it when refilling

if necessary. IPM or fractionated coconut oil is preferable, but it is better not to use alcohol in the car.

Method

1. Place the bottle on an absorbent mat.
2. **Measure the IPM or fractionated coconut oil.**
3. Add the fragrance blend and shake gently.
4. Insert the stopper and the cap with a cord or wooden top.
5. Before first use, turn the bottle upside down for 1–2 seconds so that the cord absorbs the mixture. Return it to the upright position immediately.

How to Use

Hang it in the car, wardrobe or another small space so that the bottle remains upright.

When the scent fades, briefly turn the bottle upside down and then return it to the upright position.

Do not allow the mixture to leak onto the dashboard, plastic, varnished wood or textiles.

Storage and Shelf Life

When not in use, keep the diffuser closed in a cool, dark place.

Replace the oil-based version if it smells rancid or its scent changes significantly.

How long it lasts depends on the temperature, the size of the opening and the type of carrier.

Safety

Keep out of reach of children and animals.

The mixture is not intended for use on the skin or for direct inhalation from the bottle.

While driving, the bottle must be securely attached and must not obstruct the view.

Spilt mixture may damage surfaces and create a slippery area.

Alcohol or IPM is better suited to larger rooms.

For a car, you can use fractionated coconut oil, another suitable oil or, if appropriate, IPM. You can also use essential oil on its own, but keep closing the bottle so that the scent does not become too intense and give you a headache.



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How to Prepare Active Ingredients and Other Substances

Stock Solutions for Recipes and Groups of Any Size



The Most Important Rule

Always follow the concentration and recommendations of the specific supplier. Powders with the same name may have different purity, molecular weight or recommended dosage. Prepare solutions using distilled water and an accurate scale.

The amount does not have to be based on 10 or 100 ml. Use a ratio. For example, a 10% solution means 1 part powder and 9 parts water: 1 g + 9 g, 5 g + 45 g or 10 g + 90 g. For accuracy, weighing is better than measuring volume.

Water-based stock solutions may spoil due to microbial growth. For a workshop, it is best to prepare them fresh, label them and use them on the same day. Longer storage requires a suitable preservative and verified stability.

How to Calculate the Amount of Stock Solution

Formula

Amount of stock solution = final amount of product × target concentration of active ingredient ÷ concentration of stock solution.

Example: you want to prepare 10 ml of product containing 2% niacinamide and have a 10% stock solution. The calculation is $10 \times 2 \div 10 = 2$ ml of stock solution. The remaining ingredients make up the rest of the recipe.

Niacinamide / Nicotinamide – Vitamin B3

Cosmetic niacinamide is usually produced industrially using chemical or biotechnological processes. In water-based products, it is used to support the skin barrier, soothe the skin and promote a more even-looking complexion.

Recommended stock solution for this cookbook: 10%.

Ratio: 1 part niacinamide + 9 parts distilled water.

Add the powder to the water and stir at room temperature until completely dissolved.

Keep the pH of the finished product within approximately 5–7 and avoid prolonged heating.

Label it '10% niacinamide' and include the preparation date and any preservative used.

Panthenol Powder – Provitamin B5

Panthenol is an alcohol derivative of pantothenic acid. In cosmetics, it is generally produced by industrial synthesis and used as a moisturising and soothing ingredient. Powdered D-panthenol dissolves readily in water.

Recommended stock solution for this cookbook: 10%.

Ratio: 1 part panthenol + 9 parts distilled water.

Stir at room temperature. There is no need to boil or heat the solution for a long time.

The solution may be slightly sticky. In the finished product, it is usually used at a low single-digit percentage according to the recipe and the supplier's documentation.

Label it '10% panthenol' and include the preparation date and any preservative used.

SAP – Sodium Ascorbyl Phosphate

SAP is a water-soluble derivative of vitamin C. Vitamin C can be produced through a combination of fermentation and chemical processes; SAP is then converted into a more stable phosphate salt. In cosmetics, it is used as an antioxidant and brightening active ingredient.

Recommended stock solution for this cookbook: 10%.

Ratio: 1 part SAP + 9 parts distilled water.

Dissolve at room temperature and protect from light.

Check the pH of the finished product. For the recipe in this cookbook, aim for approximately 6.0–6.5.

It is better to prepare the solution fresh and store it in a dark container.

Hyaluronic Acid – High Molecular Weight (HMW)

Hyaluronic acid is a polysaccharide naturally present in the body. Today, the cosmetic ingredient is often produced by biotechnological fermentation of microorganisms in a sugar-based growth medium and then purified. The high-molecular-weight form creates a more noticeable hydrating film on the surface and a thicker gel.



Recommended gel for this cookbook: 1%.

Ratio: 1 part powder + 99 parts distilled water.

Pour the water into a wide, clean container. Very slowly sprinkle the powder over the surface; do not pour it into one heap.

Leave it to absorb the water for 30–60 minutes without stirring, then mix carefully. Full hydration may take several hours or overnight.

Do not crush lumps aggressively. High-speed mixing may introduce many bubbles into the gel.

Hyaluronic Acid – Medium Molecular Weight (MMW)

The medium-molecular-weight form offers a balance between a surface film and a lighter feel. It is generally produced in the same way as other molecular weights; the chain length is adjusted during manufacture and processing.

Recommended gel for this cookbook: 1%.

Ratio: 1 part powder + 99 parts distilled water.

Sprinkle the powder slowly over the surface, allow it to hydrate and only then mix gently.

The gel may be less thick than HMW gel. This is not a fault.

For a blend of several molecular weights, keep the total powder content at approximately 1%, for example 0.5% HMW + 0.5% LMW.

Hyaluronic Acid – Low Molecular Weight (LMW)

The low-molecular-weight form has shorter chains and usually produces a thinner solution. In cosmetics, it is combined with a higher molecular weight to create a different feel on the skin.

Recommended solution for this cookbook: 1%, or as advised by the supplier.

Ratio: 1 part powder + 99 parts distilled water.

It usually dissolves more easily than HMW and may not form a visibly thick gel.

For sensitive skin, begin with a lower proportion and monitor tolerance.

It can be combined with HMW or MMW, but calculate the total concentration as the sum of all forms.



Preparing Solutions to Lower and Raise the pH

5% Citric Acid Solution to Lower the pH

Citric acid is generally produced industrially by fermenting sugar-based raw materials with microorganisms and then purifying it. In the recipe, it is used only to lower the pH gently.

Ratio: 1 part citric acid + 19 parts distilled water.

Example: 0.5 g acid + 9.5 g water.

Clearly label it 'ACID – lowers pH' and use a separate pipette.

Add to the product one drop at a time. Mix and measure the pH again after each drop.

Do not add concentrated powder directly to a small 10 ml product.

5% Baking Soda Solution to Raise the pH

Baking soda is sodium bicarbonate. In a cosmetic recipe, it is used to raise the pH very gently.

Ratio: 1 part baking soda + 19 parts distilled water.

Example: 0.5 g baking soda + 9.5 g water.

Clearly label it 'ALKALI – raises pH' and use a different pipette from the one used for the acid.

Add one drop at a time, mix and measure the pH again.

The solution may release bubbles when it reacts with acid; do not close the container during a vigorous reaction.

Cosgard and Other Preservatives

Cosgard is the trade name of a preservative blend. Always follow the documentation for the specific product regarding dosage, suitable pH and method of use. Drops are not an accurate unit.

For the recipes in this cookbook, allow approximately 0.6–1%, but only if this agrees with the supplier's documentation.

For 10 g of product, 1% means approximately 0.1 g of preservative.

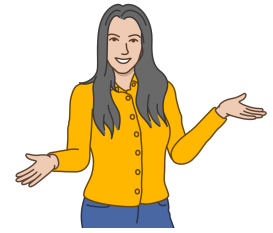
For larger groups, weigh the preservative or dispense it with an accurate pipette; do not count out hundreds of drops.

Add the preservative to the phase and at the temperature recommended by the manufacturer.

The finished product has not automatically been microbiologically verified. Selling it would require testing and compliance with legislation.

Which Oil to Choose

Overview by Skin Type



The effect of a plant oil depends on its composition, quality, freshness and the individual person's skin. The following overview is a practical aid for choosing oils for the recipes, not medical advice.

Skin: Dry, Sensitive or Mature

Oil	Main Properties
Almond	Gentle and emollient; softens the skin and supports skin comfort.
Rosehip	Regenerating; supports elasticity and a more even, fresher-looking complexion.
Avocado	Richer and nourishing; softens and supports the skin barrier.
Jojoba	Absorbs well, helps maintain balance and protects against dryness.
Hemp	Lighter and soothing; supports elasticity and overall skin comfort.
Cherry Kernel	Gentle, light and antioxidant; leaves the skin feeling soft.
Raspberry Seed	Nourishing and antioxidant; pleasant in protective blends.
Poppy Seed	Gentle, soothing and emollient; feels pleasant on the skin.

Skin: Oily, Combination or Acne-Prone

Oil	Main Properties
Grape-seed	Light, fast-absorbing, non-greasy and does not weigh the skin down.
Jojoba	Helps balance sebum, absorbs well and does not feel heavy.
Black Seed	Distinctive and soothing; better suited to targeted blends and a smaller proportion.
Hemp	Light and soothing; supports skin comfort and elasticity.
Hazelnut	Absorbs quickly, feels light and leaves a drier finish.
Cherry Kernel	Light and antioxidant; pleasant in balanced blends.

Raspberry Seed	Antioxidant; best used as an additional oil in blends.
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Skin: Normal or Balanced

Oil	Main Properties
Jojoba	Balanced, absorbs well, is not sticky and is versatile for everyday care.
Almond	Gentle and protective; softens and conditions the skin.
Grape-seed	Light and fresh; pleasant for daily use.
Cherry Kernel	Light, silky and antioxidant; generally well tolerated.
Raspberry Seed	Caring and antioxidant; suitable as an addition to blends.
Avocado	More nourishing and softening; better suited to evening care.
Rosehip	Regenerating; supports elasticity and a brighter appearance.

Other Practical Choices

For hair ends: grape-seed, jojoba or apricot kernel oil. For very dry hair, you can add a small amount of avocado oil.

For a roll-on perfume: jojoba or fractionated coconut oil, as they have little scent of their own and good stability.

For lip balm: almond, jojoba, avocado or cherry kernel oil combined with butter and wax.

For a diffuser: IPM or fractionated coconut oil. Ordinary plant oils may become rancid more quickly and leave a greasy stain.

Beware of allergies: check the group for allergies before using almond, hazelnut and other nut oils.



How to Use the Overview

Where a recipe specifies 'plant oil suited to your skin type', choose one oil or combine several. For your first attempt, it is best to use a single oil; you can experiment with blends later.

Scents and Fragrance Combinations

Inspiration for Roll-Ons, Perfumes and Diffusers



When choosing scents, the main considerations are what smells pleasant to you and what the product will be used for. The numbers below show the ratio of individual ingredients in a total of 10 drops of essential oils (EOs), or fragrance blends, which require particular care. Follow the manufacturer's recommended dosage and never use them undiluted on the skin. Always begin with a small test. For products applied to the skin, use only ingredients intended for leave-on cosmetics and comply with the supplier's limits.

Some products are sold as '100% natural essential oil', but they may not always be an oil obtained solely from one particular plant. They may instead be a blend of natural essential oils, isolated fragrance substances or a ready-made natural fragrance composition. That is not necessarily a problem. 😊 What matters is that the product is correctly labelled and states its ingredients, recommended use and safe dosage. Always check the botanical name, extraction method, composition and manufacturer's instructions.



An Important Distinction

Not every name in the list represents a conventional essential oil. Bamboo, apple, pomegranate, peach, violet and some vanilla or floral scents will often be fragrance oils, absolutes or ready-made fragrance compositions. Check whether they are intended for the skin or only for fragrancing a space.



Tom's Tip

Begin with one or two scents. Blending many ingredients is alchemy – you might create a masterpiece, but also an air freshener for the toilet or an insect repellent.

More Complex Fragrance Blends

Blend Name	Fragrance Character	Combination for 10 Drops
Floral Romance	delicate, floral, slightly woody	3 drops lavender, 2 drops rose diluted in jojoba, 1 drop ylang-ylang, 1 drop mandarin, 3 drops cedarwood
Citrus Energy	fresh, citrusy, uplifting	3 drops grapefruit, 3 drops lemon, 2 drops bergamot, 1 drop mint, 1 drop lavender
Herbal Freshness	herbal, fresh, slightly woody	3 drops rosemary, 2 drops lavender, 1 drop cedarwood, 2 drops lemongrass, 2 drops bergamot
Earthy and Sensual	warm, earthy, sweeter	3 drops patchouli, 4 drops sandalwood, 1 drop vanilla, 1 drop cinnamon, 1 drop rose or ylang-ylang
Floral Citrus	floral, fresh, gently sweet	2 drops jasmine, 2 drops orange, 3 drops bergamot, 2 drops lavender, 1 drop sandalwood
Dark	darker, resinous, earthy	3 drops patchouli, 3 drops frankincense or myrrh, 2 drops sandalwood, 2 drops bergamot
For Focus	fresh, herbal, distinctive	3 drops rosemary, 2 drops lemon, 2 drops mint, 2 drops lavender, 1 drop cedarwood
Date Night	sweeter, floral, warm	3 drops rose, 3 drops orange, 2 drops ylang-ylang, 1 drop vanilla, 1 drop sandalwood
For the Stage / Performing	energetic, fresh, slightly earthy	3 drops grapefruit, 2 drops blood orange, 2 drops bergamot, 1 drop mint, 2 drops patchouli
Everyday Fresh	clean, fresh, versatile	3 drops lavender, 3 drops cedarwood, 2 drops bergamot, 1 drop grapefruit, 1 drop rosemary
Chill	cooling, fresh, relaxed	3 drops mint, 3 drops lemon, 2 drops lavender, 2 drops cedarwood
Mood: Rebel	bold, spicy, unconventional	3 drops blood orange, 3 drops patchouli, 2 drops cinnamon, 2 drops bergamot
Clean	clean, floral-citrus	3 drops bergamot, 3 drops white flowers (neroli or jasmine), 4 drops mandarin

Simple Combinations of Two or Three Scents

Blend Name	Fragrance Character	Combination for 10 Drops
Bamboo and Jasmine	delicate, clean, floral	5 drops bamboo, 5 drops jasmine
Apple and Cinnamon	fruity, sweet, spicy	6 drops apple, 4 drops cinnamon
Vanilla and Cedarwood	warm, sweet, woody	6 drops vanilla, 4 drops cedarwood
Pomegranate and Mandarin	fruity, juicy, fresh	6 drops pomegranate, 4 drops mandarin
Lavender and Bergamot	fresh, delicate, calming	5 drops lavender, 5 drops bergamot
Mint and Lemon	cooling, citrusy, very fresh	5 drops mint, 5 drops lemon or mandarin
Cedarwood and Grapefruit	woody, fresh, slightly bitter	6 drops cedarwood, 4 drops grapefruit
Rosemary and Lemon	herbal, fresh, distinctive	5 drops rosemary, 5 drops lemon or grapefruit
Sandalwood and Frankincense	warm, resinous, meditative	5 drops sandalwood, 5 drops frankincense or myrrh
Patchouli and Vetiver	deep, earthy, woody	6 drops patchouli, 4 drops vetiver
Eucalyptus, Mint and Lemon	very fresh, cooling, clean	4 drops eucalyptus, 3 drops mint, 3 drops lemon
Rose and Ylang-Ylang	strongly floral, sweet	5 drops rose, 5 drops ylang-ylang
Neroli and Lavender	delicate, floral, fresh	6 drops neroli, 4 drops lavender
Jasmine and Rosewood	floral, soft, slightly woody	5 drops jasmine, 5 drops rosewood
Violet and Bergamot	powdery, floral, fresh	6 drops violet, 4 drops bergamot
Orange Blossom and Peach	sweet, fruity-floral	5 drops orange blossom, 5 drops peach

Safety When Working with Fragrances

Alcohol-based perfume is flammable. Work away from flames, candles, hotplates and sparks. For products used on the skin, first carry out a patch test and begin with a lower concentration.

Check the phototoxicity of cold-pressed citrus oils.

A diffuser can use a different concentration from a skin product. However, do not use a room fragrance blend as perfume.

Cinnamon, clove, oregano and other very intense oils may cause significant irritation; it is better to omit them from school products used on the skin...

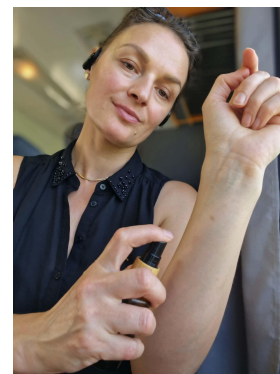


Safety and Responsibility

The recipes are intended for educational activities and personal use. When making them, always follow the stated procedures, recommended concentrations, hygiene rules and the manufacturer's instructions for each ingredient. Children and younger participants may prepare the products only under adult supervision.

Every person's skin may react differently. Before first use, therefore test a small amount of the product on a small area of skin.

Do not use the product if you have a known allergy to any ingredient, on irritated or injured skin, or in a way that conflicts with the recommended use. If burning, itching, redness or another adverse reaction occurs, wash the product off immediately and stop using it. Seek medical advice for a severe or persistent reaction.



GreenScan cannot guarantee individual tolerance or the shelf life of products prepared outside controlled conditions. The person making the product or leading the activity is responsible for measuring the ingredients correctly, keeping equipment clean, storing and labelling the finished product, and ensuring its correct use.

GreenGate₂ DIY recipes are not intended as a basis for the commercial manufacture or sale of cosmetics without further testing and compliance with all legal requirements.

Use of the Material

GreenGate₂ DIY recipes are intended for education and personal use, not as a basis for commercial production without further testing and legal procedures.

The photographs used in the document come from workshops held as part of the GreenGate project₂. The illustrations of Tom, Dr Green and Pam are part of the GreenGate₂ project.



About the Cosmetic Cookbook and Its Authors

Acknowledgements

These DIY cosmetic recipes are suitable both for individuals and for group work, for example in environmental clubs, chemistry lessons or environmentally focused subjects, project days and other educational activities.

We enjoy visiting schools with workshops and talks about harmful substances around us and ways to avoid unnecessary chemicals. The practical activity of making your own cosmetics is always the icing on the cake.

We would also like to thank all the schools, clubs, organisations, educators and young people with whom we have been able to carry out these activities. Thank you for your valuable feedback, questions and enthusiasm.



Contact

Do you have a question about the recipes, need advice on choosing ingredients, or would you like to organise a workshop at your school, club or organisation? Write to us.

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Publication Information

GreenGate₂ Cosmetic Cookbook

Created as part of the project **GreenGate₂**.

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Illustrations and graphic design: Petr Miloš

Published by: GreenScan

Responsible person: Žaneta Milošová

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This material was created by GreenScan in cooperation with the partners of the GreenGate₂ project.



The GreenGate₂ project (registration no. 2023-2-CZ01-KA220-YOU-000174554)

was implemented under the Erasmus+ programme with financial support from the European Union.

Co-funded by the European Union. The views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.