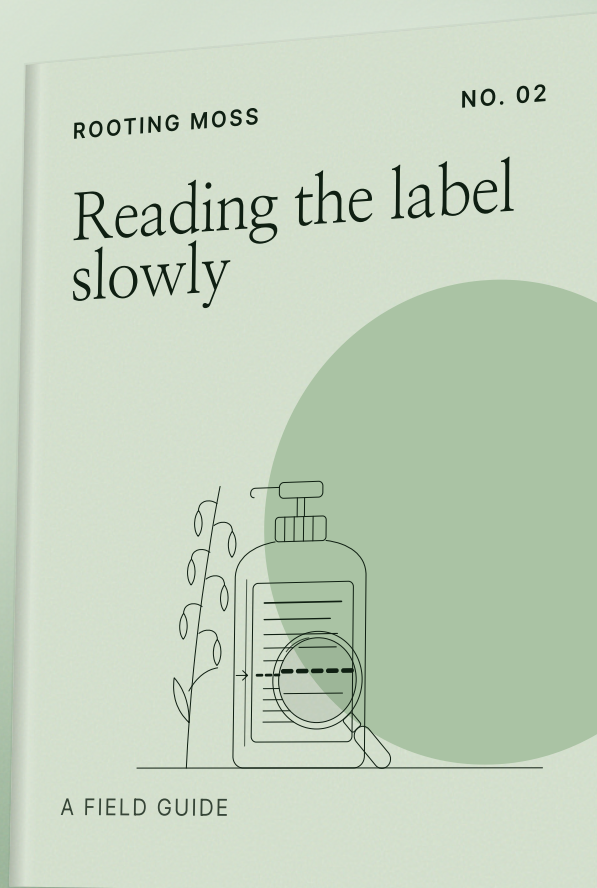




FIELD GUIDE · BOTANICALS

# Read the label and know what a formula holds

This guide is for considered shoppers who read ingredient lists but feel unsure what order and names really prove. After reading it you will be able to sort a list into groups, spot the one percent line, and judge plant claims with calm context.

- **Order shows weight**  
Ingredients above one percent run heaviest first, then order stops meaning much.
- **Low dose works**  
Many actives do their job well below one percent when the formula supports them.
- **Names hide grades**  
One INCI name can cover different grades, blends, and processing histories.

By Carrie Ellsworth · Updated Aug 16, 2026 · 10 min read

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Most shoppers scan for the hero plant and stop there. A familiar name near the end feels like proof of a weak formula, while a long chemical name near the top feels like cause for worry. Learning to read in groups changes that habit, and the list becomes a quiet record of structure rather than a verdict on quality.

01

What INCI names actually are

Every cosmetic sold in the United States carries a standardized ingredient list. INCI stands for International Nomenclature of Cosmetic Ingredients, a global naming system published in the International Cosmetic Ingredient Dictionary and Handbook by the Personal Care Products Council. The system has been in place since the 1970s and is used in the USA, China, Japan and all of the European Union, which means the same name travels across markets.

That shared language explains why plant names look formal. Botanical ingredients use Latin binomial names followed by common name in parentheses, such as Butyrospermum Parkii (Shea) Butter and Avena Sativa (Oat) Kernel Oil. The Latin part keeps the identity exact across languages, while the common name helps a shopper recognize the plant. A formula rooted in shea or oat will state it this way rather than using a farm name or a poetic extract title.

Water follows the same logic. Water may be written as Water, Aqua or Eau on one label to allow sale across markets, and it is one ingredient not three. Brands print the synonyms together so one package can move between regions without reprinting. Readers can treat that string as a single base ingredient.

Scientific names also deserve a slower look. Tocopherol is vitamin E and sodium chloride is table salt, showing that long scientific names do not mean harsh and short names do not mean gentle. Sounding natural gives no safety promise, and sounding chemical gives no warning on its own. The name tells what the substance is called in trade, not how the skin will receive it.

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## 02

### Order tells you weight, highest to lowest

In the United States cosmetic ingredient labeling is required under the Fair Packaging and Labeling Act and FDA regulations at 21 CFR 701.3. Ingredients above 1 percent must be listed in descending order of predominance, with the greatest amount first. This rule shapes the whole top of the list, where the formula architecture lives.

Water is almost always first in serums, cleansers and moisturizers because it is the base medium, and seeing Water first is evidence of a normal formula. Water carries humectants, helps extracts dissolve, and gives emulsions their fluid body. First ingredients in skincare are usually water or aloe at 70 to 95 percent of product, with the next four ingredients typically at 3 to 5 percent. Those first five or six lines therefore describe texture and delivery more than treatment power.

Anhydrous formulas such as balms and oils open with oils or butters instead of water. Without water there is no aqueous base to list, so the plants that form the body come first. A balm may start with a butter and a wax, while a facial oil may start with two or three carrier oils. The principle stays the same, since the largest share still leads.

The First Five rule is unreliable because the first five often build the base cream or lotion format while effective antioxidants, retinoids and other actives can sit lower and still work. A moisturizer needs its water phase, its emollients and its emulsifier before it can carry anything else. Judging treatment strength from those structural ingredients misses the point of their role, which is to hold and deliver the smaller doses that follow.

#### FROM THE EDITORS

Read the top of the list for format, not for potency. Water, humectants, emollients and emulsifiers explain whether the product is a gel, lotion, cream or oil, and how it may feel on skin.

## 03

### Find the 1 percent line

Below a certain point, order loses its ranking power. Ingredients present at 1 percent or less may be listed in any order after those present at more than 1 percent. As cosmetic chemist Perry Romanowski puts it, "1% line refers to the place in the list of ingredients which indicates where the concentration of ingredients is less than 1%."

No brand prints that line. Readers find it by looking for ingredients that formulators rarely use above 1 percent. Reliable markers that you are past the 1 percent line include preservatives such as Phenoxyethanol, chelating agents such as Sodium Phytate or Disodium EDTA, gums such as Xanthan Gum, and pH adjusters such as Sodium Phosphate and Disodium Phosphate. Seeing one of these names suggests everything after it is also at 1 percent or less.

Several familiar helpers confirm the pattern. Parabens, sodium benzoate, potassium sorbate and sodium dehydroacetate are preservatives never used at more than 1 percent.

Phenoxyethanol has a legal limit in the EU that it can never be above 1 percent concentration. Xanthan Gum is a thickener usually used at about 0.5 percent and rarely above 1 percent unless the product is viscous. When these appear, they act like field markers in tall grass.

Position below the 1 percent line cannot be read as a ranking because brands may legally move claim ingredients up and preservatives down within that section. A hero extract listed just before Phenoxyethanol may still be present at a very small amount. A preservative listed near the end may be doing its normal job at its normal low level. Use the browser find function and check neighbors rather than counting places. If Centella sits among gums, chelators and pH adjusters, treat it as part of the low dose group and look for other clues about strength, such as the brand stating a tested level or describing the extraction approach.

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## 04

### What concentrations mean for actives

Dr. Natacha Bonjout, Pharm.D., offers a useful caution: "An ingredient list tells you what is in a product. It does not tell you how well the product works." The same chemist adds a second line worth keeping nearby: "Concentration matters. Concentration without context tells you almost nothing."

Context starts with dose range. Concentration only matters in context because many effective actives work below 1 percent while others need higher levels, and the list never shows exact percentages, grades, processing or how the formula performs. Astaxanthin does its job at clinically tested levels of just 0.035 percent even when listed ninth, as in Firm plus Repair Overnight Serum. Prescription retinoids usually contain 0.1 percent at most yet are more potent than over the counter retinol which typically contains a much higher percentage. Shopping guides sometimes promote the 1 percent line to reject products with hero ingredients below markers, while formulators stress that low dose actives can be potent and context matters.

Other materials need more room to act. Vitamin C forms range from a fraction of a percent up to 20 percent depending on whether the form is an acid, alcohol, ester or liposomal form. Niacinamide, glycolic acid and ascorbic acid often appear higher because their studied ranges sit higher, though the exact share never appears on a cosmetic label. Higher is not always better, since irritation, stability and pH limits shape the usable range. A strong acid at a high share may need low pH and careful packaging, while a gentle ester at a lower share may suit daily use.

Form, formula, pH, packaging and use pattern all change what a percentage means. There is no universal effective dose for every extract, oil or isolate because dose depends on those factors. A plant isolate that calms redness in one emulsion may do little in a rinse off cleanser with short contact time. For that reason, treat the list as a map of presence, then look to the brand for the tested level, the form used, and the usage directions that complete the picture.

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## 05

# Extracts, oils, isolates and hidden ingredients

One INCI name can cover more than one reality. The same INCI name can cover different grades, such as food grade versus cosmetic Xanthan Gum Clear or Soft, different Cetearyl Alcohol ratios of 30:70, 50:50 and 70:30, and different Dimethicone chain lengths. Grade affects clarity, slip, viscosity and skin feel, yet none of that detail appears in the name. Two creams can list the same thickener and behave nothing alike.

### Extracts carry their solvent

A botanical extract is rarely the plant alone. Leaves, roots or flowers are steeped in water, glycerin, oil or alcohol, then filtered and sometimes preserved. The INCI line may show only the plant name, while the solvent and preservative travel inside that extract without separate disclosure. An oat or centella extract can therefore differ in strength and character depending on harvest, plant part, solvent ratio and storage. The name confirms identity, not intensity.

### Oils, butters and isolates read differently

A pressed oil or butter brings its full lipid field, including triglycerides and small amounts of unsaponifiables that shape scent and texture. An isolate pulls one molecule from that field for a narrower task. Both have a place, and neither is superior by definition. The list shows which approach the formulator chose, while the placement shows whether it structures the formula or supports it in a smaller amount.

### Trade names and fragrance

Trade names must not appear alone and must be broken into INCI components, for example Matrixyl 3000 and preservative blend Euxyl PE 9010 listed as Phenoxyethanol, Ethylhexylglycerin. Shoppers may need to search the grouped INCI names to recognize a peptide blend or a preservative system. Regional rules add another layer. Skin1004 Madagascar Centella Ampoule lists only Centella Asiatica Extract in Korea but lists Centella Asiatica Extract plus Water, Glycerin, Cellulose, 1,2-Hexanediol and other components in the USA. The formula in the bottle may be similar, while disclosure rules change what appears on paper. South Korean ordering rules are described as different but exact regulations are not confirmed, so cross market comparisons need care.

Fragrance follows its own custom. Fragrance or Parfum ingredients can be grouped without full disclosure as trade secrets, while certain fragrance allergens such as Linalool or Citronellol must be listed separately. A plant scent from essential oils will often appear through those allergen names near the end of the list. Sensitive readers can use those separate allergen listings as a practical signal, even when the full perfume blend stays closed.

**FROM THE EDITORS**

Marketing words such as clean, natural and dermatologist tested carry no regulatory meaning for this guide. Those words do not define what they mean or what thresholds they require, so treat them as brand language and return to the INCI list for firmer ground.

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# 06

## What the list cannot tell you and label exceptions

Order shows relative position not exact formula. The same INCI list can describe formulas with very different percentages, textures and performance, so the list is disclosure not a blueprint for duping or judging efficacy. One lotion may feel light and one may feel rich while sharing most names in a similar sequence. Processing, heating and cooling times, grade choices and ingredient interactions shape the result without ever appearing on the package.

The gaps are wide. The list alone does not give exact percentages for most ingredients, nor grade, molecular weight, processing method or stability data. They do not settle every plant dose, since dose shifts with chemistry and use. For questions about irritation, allergy, pregnancy, or a persistent skin condition, a pharmacist, dermatologist or other qualified professional offers guidance beyond label reading alone.

Some products follow separate labeling paths. US OTC products such as sunscreens or benzoyl peroxide acne treatments list active ingredients first with exact amounts, then inactive ingredients. That active drug panel gives a true percentage, unlike the cosmetic portion that follows. Australian sunscreens only have to list UV filters and preservatives, not the full ingredient list. When shopping across borders, expect the shape of the label to change even if the cream inside looks familiar.

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## 07

### The checklist

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- ☐ Read INCI names as identity, not warning
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- ☐ Translate Latin binomials to common plant names
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- ☐ Treat Water, Aqua, Eau as one base ingredient
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- ☐ Read top five for texture and format
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- ☐ Expect water first in lotions, oils first in balms
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- ☐ Mark Phenoxyethanol as likely past one percent
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- ☐ Mark Xanthan Gum and chelators as line markers
- 
- ☐ Compare hero plant to its low dose neighbors
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- ☐ Remember low dose actives can still be effective
- 
- ☐ Ask brand for form and tested level of key active
- 
- ☐ Check allergen names when sensitive to scent
- 
- ☐ Set aside clean and natural as unregulated words
- 
- ☐ Note OTC active panel for sunscreens and acne care
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## 08

### Sources and further reading

- INKEEDecoder - Decode your skincare ingredients · [inkeedecoder.com](https://inkeedecoder.com)
- How to Read an INCI List (Skincare Ingredients Explained) · [theinkeylist.com](https://theinkeylist.com)
- Skincare Ingredient Lists: What Product Labels Won't Tell You · [blog.reneerouleau.com](https://blog.reneerouleau.com)
- The INCI rules: why you can't judge a skincare product by its ingredient list alone · [medium.com](https://medium.com)
- How to Read an INCI List: Decoding Your Skincare · [bonjoutbeauty.com](https://bonjoutbeauty.com)
- The 1% Line Skincare Ingredients Rule — PBL Magazine · [pblmagazine.co.uk](https://pblmagazine.co.uk)

For information only, not medical advice. Check with a qualified professional before using herbal remedies.



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Carrie looks after the brands Rooting Moss works with and makes sure every sponsored page says so. She came from the retail side of botanical skincare.

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