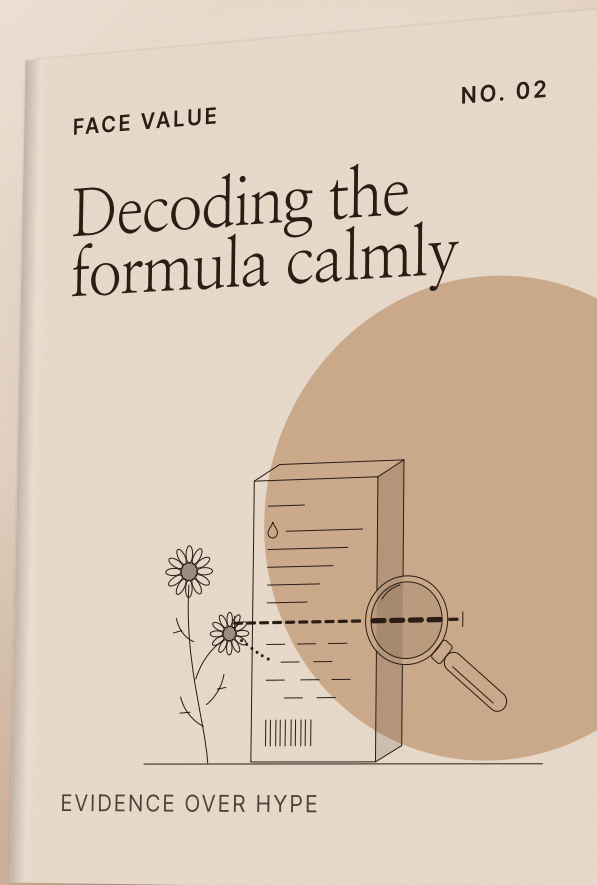




EVIDENCE GUIDE · FORMULAS

A practical guide to decoding what ingredient lists reveal

This guide is for careful buyers who scan labels yet wonder what sequence and Latin names can prove. After two short reads you will group ingredients with confidence, locate the low-dose zone, and weigh botanical claims against the data.

- **Sequence signals share**
Names over one percent appear in weight order, then ranking ends.
- **Small amounts count**
Many proven actives work under one percent in a sound base.
- **Grades stay hidden**
A single INCI label can mask varied purity, blends, and processing.

By Benjamin Marsh · Updated Aug 17, 2026 · 10 min read

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You stand in the aisle, bottle turned over, eyes hunting for centella while skipping past polysyllabic terms. A beloved botanical sits near the finish and looks too faint to matter, while an unfamiliar chemical near the start looks suspect. Group reading steadies that reflex, and the list turns into a neutral outline of build rather than a score for worth.

01

What standardized names really record

All cosmetics marketed in the United States must bear a uniform declaration of contents. INCI means International Nomenclature of Cosmetic Ingredients, a worldwide naming code issued in the International Cosmetic Ingredient Dictionary and Handbook by the Personal Care Products Council. The code dates from the 1970s and operates in the USA, China, Japan and across the European Union, so one designation follows a material from market to market.

That common vocabulary accounts for the formal style of plant entries. Botanicals appear as Latin binomials with everyday names in brackets, for instance *Butyrospermum Parkii* (Shea) Butter and *Avena Sativa* (Oat) Kernel Oil. Latin fixes botanical identity across languages, while the bracketed term helps a buyer spot the source. A preparation built around shea or oat will use that format instead of a farm label or a lyrical extract phrase.

Water obeys the same convention. Water can read as Water, Aqua or Eau within a single declaration to permit cross border sale, and those terms denote one component rather than three. Makers print the equivalents side by side so a single pack can travel among regions without new printing. Shoppers may regard that string as one foundation material.

Formal chemical terms also merit slower judgment. Tocopherol denotes vitamin E and sodium chloride denotes table salt, which shows that an elaborate scientific term does not signal harshness and a brief term does not signal gentleness. A natural sound confers no promise of safety, and a synthetic sound confers no sign of risk by itself. The term reports the trade identity of a substance, not its reception by skin.

02

Why sequence reflects proportion, most to least

Cosmetic content declarations in the United States fall under the Fair Packaging and Labeling Act and FDA rules at 21 CFR 701.3. Components above 1 percent must appear in falling order of predominance, starting with the largest share. That requirement governs the upper register of the declaration, where structural design resides.

Water nearly always heads serums, cleansers and moisturizers because it supplies the carrier fluid, and Water in first place signals an ordinary build. Water transports humectants, assists solution of extracts, and lends fluid structure to emulsions. Lead materials in skin preparations are commonly water or aloe at 70 to 95 percent of product, with the following four materials generally at 3 to 5 percent. The opening five or six entries therefore convey texture and transport rather than treatment strength.

Water-free formats such as balms and oils begin with lipids or butters rather than water. Lacking an aqueous carrier to declare, the plants supplying body take the lead. A balm can commence with a butter plus a wax, while a facial oil can commence with two or three carrier oils. The logic remains constant, because the greatest fraction still comes first.

The First Five shortcut fails because those early slots usually construct the cream or lotion chassis while proven antioxidants, retinoids and kindred actives may reside further down and remain useful. A moisturizer requires its aqueous phase, its softening lipids and its emulsifier before it can support anything further. Assessing treatment capacity from those framework materials overlooks their purpose, which involves holding and conveying the smaller charges placed later.

FROM THE EDITORS

Judge format from the opening lines, not strength. Water, humectants, emollients and emulsifiers reveal whether a preparation is a gel, lotion, cream or oil, plus its likely skin feel.

03

How to place the 1 percent threshold

Past a defined level, sequence stops ranking contents. Materials at 1 percent or below may follow in any sequence after materials above 1 percent. Cosmetic chemist Perry Romanowski describes the 1 percent line as the point in the ingredient list where concentrations fall below 1 percent.

No maker prints that boundary. Shoppers locate it through materials that formulators seldom dose above 1 percent. Dependable signs that you have crossed the 1 percent line include preservatives like Phenoxyethanol, chelators like Sodium Phytate or Disodium EDTA, gums like Xanthan Gum, and pH correctors like Sodium Phosphate and Disodium Phosphate. Encountering such terms implies that the entries after them also sit at 1 percent or below.

Several routine auxiliaries support the method. Parabens, sodium benzoate, potassium sorbate and sodium dehydroacetate serve as preservatives never applied above 1 percent. In the EU, Phenoxyethanol has a legal ceiling and it must stay at or below 1 percent concentration. Xanthan Gum serves as a thickener generally applied near 0.5 percent and seldom above 1 percent unless the preparation is viscous. Where these occur, they function as survey stakes in dense cover.

Placement beneath the 1 percent threshold cannot serve as rank because makers may lawfully shift claim materials earlier and preservatives later inside that zone. A featured extract directly ahead of Phenoxyethanol may still occur in a trace quantity. A preservative toward the finish may perform its standard role at its standard modest level. Use the browser find function and inspect adjacent entries instead of counting slots. If Centella rests amid gums, chelators and pH adjusters, view it within the low dose cluster and search for further signs of potency, such as the maker citing an assayed level or outlining the extraction approach.

04

Why dose needs wider context for actives

Dr. Natacha Bonjout, Pharm.D., adds a caution that is worth keeping in mind. She notes that an ingredient list shows what a product contains. It does not show how well that product works. The same chemist offers another line to keep close. "Concentration matters. She says concentration without context reveals almost nothing.

Context begins with dosage bands. Concentration needs context because many actives work below 1 percent while others need more, and lists omit exact amounts, grades, processing and performance. Astaxanthin can act at a clinically tested 0.035 percent even in ninth place, as in Firm plus Repair Overnight Serum. Prescription retinoids often top out at 0.1 percent yet can be more potent than over the counter retinol with a much higher percentage. Some shopping guides use the 1 percent line to dismiss products with late listed hero ingredients, while formulators note low dose actives can be potent and context counts.

Different substances demand greater space to function. Vitamin C forms span from a fraction of a percent to 20 percent based on whether the form is acid, alcohol, ester or liposomal. Niacinamide, glycolic acid and ascorbic acid often sit higher because their studied ranges sit higher, though the precise fraction never shows on a cosmetic declaration. Greater concentration is not invariably superior, because irritation, stability and pH ceilings define the workable band. A potent acid in generous proportion may require low pH and protective packing, while a mild ester in modest proportion may fit everyday application.

Form, base, pH, container and pattern of application together alter the meaning of any percentage. There is no single effective dose for each extract, oil or isolate because dose turns on those factors. A plant isolate that calms redness in one emulsion may show little effect in a rinse off cleanser with brief contact. For that reason, regard the declaration as an index of inclusion, then ask the maker for the assayed level, the chemical form, and the directions for use that complete the assessment.

05

Extracts, lipids, single molecules and concealed parts

A single INCI designation may mask more than one truth. One INCI name can cover distinct grades, like food grade versus cosmetic Xanthan Gum Clear or Soft, Cetearyl Alcohol ratios of 30:70, 50:50 and 70:30, and varied Dimethicone chain lengths. Grade shapes clarity, glide, thickness and tactile character, yet none of those traits surface in the designation. Two creams may declare an identical thickener and behave in wholly separate ways.

Extracts arrive with their carrier

A plant extract seldom contains herb material alone. Leaves, roots or flowers soak in water, glycerin, oil or alcohol, pass through filtration and sometimes gain preservation. The INCI entry may cite only the botanical identity, while the vehicle and preservative remain nested within that extract without individual listing. An oat or centella preparation can thus vary in intensity and profile with harvest, plant section, solvent proportion and storage. The term verifies identity, not strength.

Pressed fats and single molecules read apart

A pressed oil or butter contributes its entire lipid spectrum, with triglycerides plus minor unsaponifiables that influence aroma and body. An isolate extracts one compound from that spectrum toward a focused role. Each route holds merit, and neither outranks the other in principle. The declaration reveals which path the developer selected, while position reveals whether the material frames the preparation or assists it at a minor level.

Branded blends and scent rules

Trade names cannot stand alone and must be split into INCI parts, as with Matrixyl 3000 and preservative blend Euxyl PE 9010 shown as Phenoxyethanol, Ethylhexylglycerin. Buyers may have to look up the grouped INCI terms to identify a peptide mixture or a preservation scheme. Regional codes create a further wrinkle. Skin1004 Madagascar Centella Ampoule shows only Centella Asiatica Extract in Korea but shows Centella Asiatica Extract plus Water, Glycerin, Cellulose, 1,2 Hexanediol and other parts in the USA. The liquid in the bottle may stay close, while disclosure statutes alter the printed record. South Korean ordering rules are called different but exact rules remain unconfirmed, so cross market comparison calls for care.

Scent observes separate practice. Fragrance or Parfum may be grouped without full detail as trade secrets, while certain fragrance allergens like Linalool or Citronellol must appear separately. A botanical aroma from essential oils will commonly surface through those allergen terms near the close of the declaration. Reactive shoppers may treat those discrete allergen entries as a workable warning, even while the complete perfume mixture remains undisclosed.

FROM THE EDITORS

There is no regulatory definition for phrases like clean, natural and dermatologist tested. Read them as brand language and return to the INCI list for firmer ground, since they state no set meaning or required thresholds.

06

Where the declaration stops and special cases begin

Sequence indicates comparative rank rather than precise recipe. An identical INCI sequence may describe preparations with sharply separate proportions, textures and behavior, so the declaration serves disclosure rather than a guide for copying or judging efficacy. One lotion may feel weightless and another may feel dense despite sharing most terms in comparable succession. Processing, heating and cooling times, grade selection and interactions among materials mold the outcome without ever reaching the pack.

The omissions remain broad. The list alone gives no exact percentages for most ingredients, and no grade, molecular weight, processing method or stability data. They do not fix each plant dose, since dose moves with chemistry and use. Readers with irritation, allergy, pregnancy, or a lasting skin condition should see a pharmacist, dermatologist or other qualified professional rather than label reading alone.

Certain categories use distinct declaration tracks. US OTC products like sunscreens or benzoyl peroxide acne treatments show active ingredients first with exact amounts, then inactive ingredients. That active drug panel supplies a factual percentage, unlike the cosmetic section that trails it. Australian sunscreens are required to show only UV filters and preservatives, not the complete ingredient list. When buying across frontiers, anticipate a changed label shape even where the cream itself seems familiar.

07

The checklist

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- ☐ View INCI terms as identity, not caution
 - ☐ Render Latin binomials into everyday plant terms
 - ☐ Count Water, Aqua, Eau as a single foundation
 - ☐ Assess first five for feel and vehicle
 - ☐ Anticipate water first in lotions, lipids first in balms
 - ☐ View Phenoxyethanol as probable sub one percent marker
 - ☐ View Xanthan Gum plus chelators as boundary clues
 - ☐ Weigh featured botanical against nearby low dose aids
 - ☐ Recall modest dose actives may still perform
 - ☐ Request form plus assayed level for central active
 - ☐ Scan allergen terms when fragrance troubles you
 - ☐ Dismiss clean plus natural as undefined marketing
 - ☐ Consult OTC drug panel for sunscreens and acne items
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08

Sources and further reading

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

For information only, not medical advice. A study summary is not a diagnosis; see a board-certified dermatologist about anything that persists, spreads or hurts.



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Benjamin looks after the brands Face Value works with and makes sure every sponsored page is labelled as one. He spent six years on the commercial side of a New Jersey contract lab, which is where he learned what a stability test costs.
