

# product label reading & formulation basics

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# Introduction

- Labelling is more than just a tag on a product it is the voice of the product itself. Through a simple piece of paper, metal, or plastic, a label communicates vital information such as composition, price, manufacturing details, and expiry date. It not only informs consumers but also gives each product a unique identity in a competitive market.





# labels

- Labels provide critical information about a product's composition, purpose, and safety, allowing healthcare and beauty specialists to evaluate product suitability for different skin types and clinical conditions.



# Main categories of labels

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**Cosmetics:** products designed primarily to cleanse, beautify, or improve appearance without altering body functions (e.g., creams, shampoos, makeup).



**Cosmeceuticals:** products positioned between cosmetics and pharmaceuticals, containing biologically active ingredients that may improve skin health or function (e.g., anti-aging serums, whitening creams).



**Pharmaceuticals:** medicinal products formulated to treat, prevent, or diagnose diseases, requiring strict clinical testing and regulatory approval



# Regulatory Authorities

- Regulatory authorities ensure that products meet approved standards of safety, quality, and accurate labeling. The main organizations include:
- **FDA (U.S. Food and Drug Administration):** Regulates the safety, labeling, and marketing of food, drugs, and cosmetics in the United States.

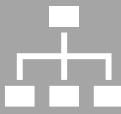


# Regulatory Authorities

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**EMA (European Medicines Agency):** Oversees the evaluation and supervision of medicines within the European Union.



**ISO (International Organization for Standardization):** Establishes global standards for quality management, safety, and manufacturing processes.



**Local Ministries of Health:** Monitor national regulations to protect public health and ensure product compliance with local laws.



# Types of Labeling

## 1. Brand Label

- Shows the brand name, logo, or trademark.
- Helps the product stand out in the market and build consumer recognition.

## 2. Descriptive Label

- Provides information about the product, including ingredients, usage instructions, and benefits.
- Ensures the consumer understands how to use the product safely and effectively.



# Types of Labeling

## 3. Grade Label

- Indicates the quality or standard of the product.
- Helps consumers distinguish between different quality levels.

## 3. Informative Label

- Provides additional technical or regulatory information, such as batch number, manufacturing date, expiry date, storage conditions, and certifications.
- Ensures traceability and compliance with regulations.

## 4. Combination Label

- Integrates two or more types of labels (e.g., brand + descriptive + informative) in one.
- Most modern products use combination labels to provide complete product information.





Brand name

Product type

Directions

Net contents

Manufacturer/  
Distributor

Other  
symbols  
eg Recyclable  
Cruelty Free



INCI List  
List of ingredients in  
descending order  
of concentration

PAO  
"Period after  
opening"

The product must  
be used within the  
timeframe noted  
inside the jar  
symbol (in months)  
after it has been  
opened.

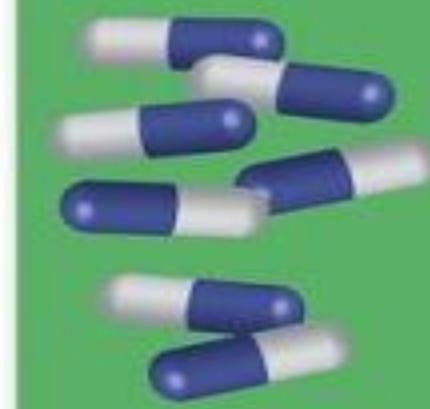
# Formulation Basics



# Formulation



Tablets



Capsules



Powders



Oral  
Solutions



Injectable  
Solutions

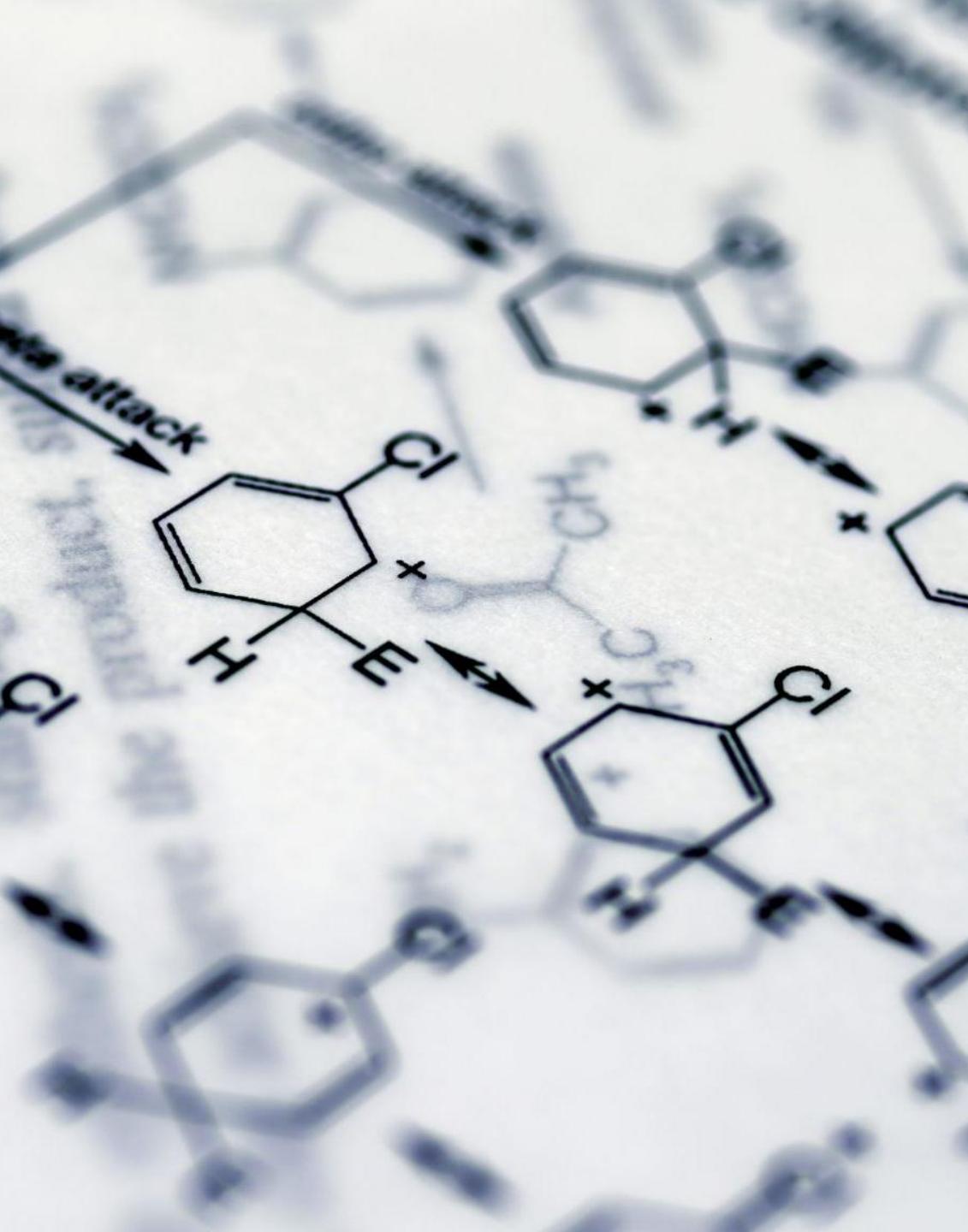


# Formulation

- A formulation is the process of combining different ingredients in specific proportions to create a product with desired properties and functionality. In cosmetics and pharmaceuticals, formulation determines a product's performance, texture, stability, and safety. Well-designed formulations ensure that active ingredients are effective, the product is pleasant to use, and it remains stable during storage.







# Components of a Cosmetic Formulation

1. Active Ingredients – Responsible for the product's primary effect, such as hydration or anti-aging (e.g., hyaluronic acid, niacinamide).
2. Excipients/Additives – Support the formulation by providing structure, texture, or functionality (e.g., solvents, emulsifiers, thickeners, fragrances).
3. Preservatives and Stabilizers – Ensure product safety and shelf-life by preventing microbial growth and degradation (e.g., parabens, phenoxyethanol, antioxidants).
4. Colorants and Fragrances – Enhance the product's appearance and sensory appeal, contributing to consumer experience.



# FOUNDATION CREAM

✓ FORMULATION:-

► <i>LANOLIN</i>	<i>2g</i>
► <i>PROPYLENE GLYCOL</i>	<i>8g</i>
► <i>CETYL ALCOHOL</i>	<i>0.5g</i>
► <i>STEARIC ACID</i>	<i>10g</i>
► <i>POTASSIUM HYDROXIDE</i>	<i>0.4g</i>
► <i>WATER</i>	<i>79.10ml</i>
► <i>PERFUME AND PRESERVATIVE</i>	<i>q.s.</i>



# Steps in Designing a Basic Formulation

1

Define product purpose and target skin type.

2

Select active and supportive ingredients.

3

Determine concentrations and compatibility.

4

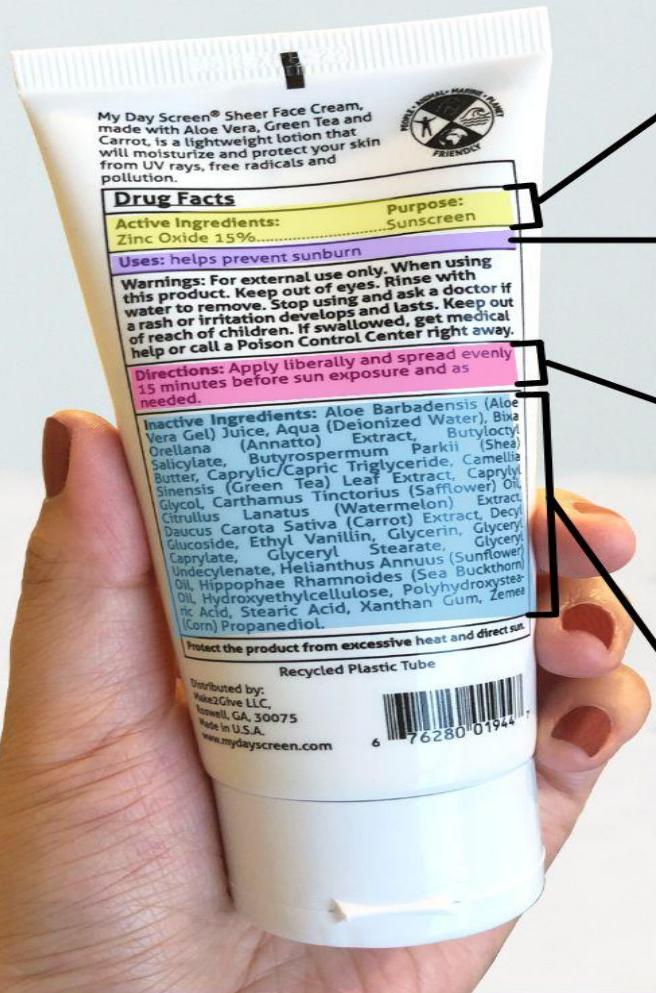
Perform lab trials (stability, pH, microbial, and sensory tests).

5

Prepare product documentation and labeling per regulations.



# HOW TO READ A SUNSCREEN LABEL



Active ingredients, such as Zinc Oxide, is what protects the skin from UV rays.

Sunscreen helps prevent sunburn but the higher the SPF the more effective it is preventing sunburns.

Spread sunscreen evenly to cover face and body—including sensitive areas like ears, nose, eyebrows, and feet. Wait 15 minutes before sun exposure to ensure effectiveness.

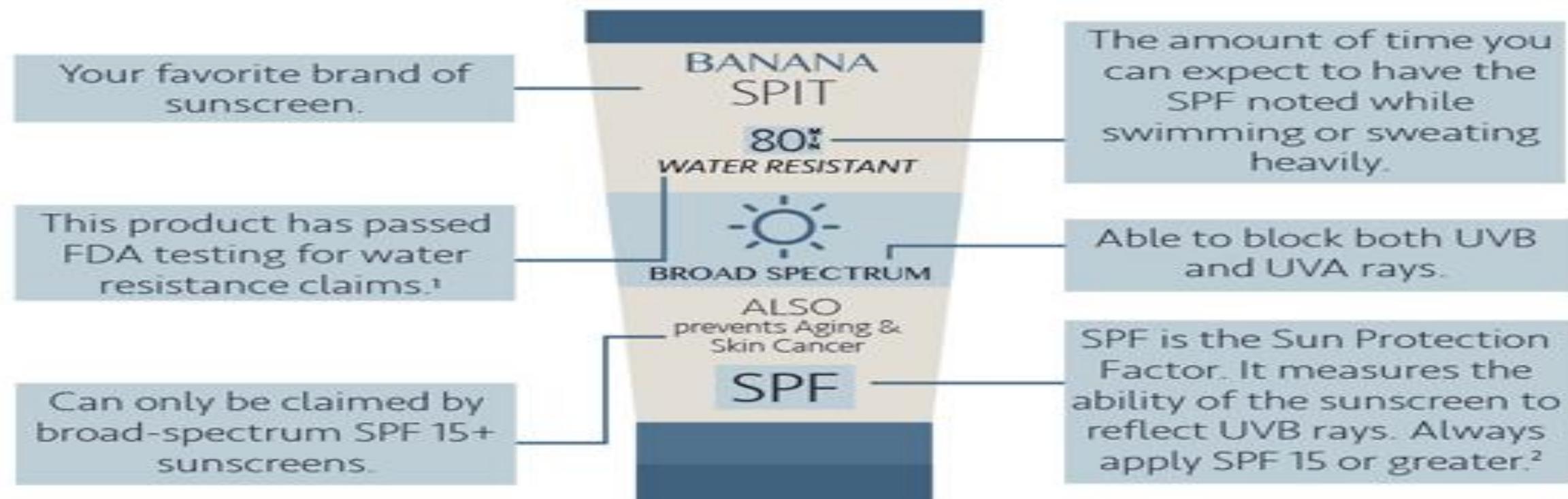
Inactive ingredients help preserve, moisturize, condition, and smooth out the sunscreen to benefit and protect the skin.

[www.mydayscreen.com](http://www.mydayscreen.com)



Drug Facts	Active ingredient	Purpose
Titanium dioxide 11%	.....	Sunscreen
<b>Uses</b>		
• helps prevent sunburn • if used as directed with other sun protection measures (see <b>Directions</b> ), decreases the risk of skin cancer and early skin aging caused by the sun		
<b>Warnings</b>		
For external use only		
Do not use on damaged or broken skin		
When using this product keep out of eyes. Rinse with water to remove.		
Stop use and ask a doctor if rash occurs		
Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.		
<b>Directions</b>		
For sunscreen use:		
• shake well before use		
• apply generously 15 minutes before sun exposure		
• reapply:		
• after 40 minutes of swimming or sweating		
• immediately after towel drying		
• at least every 2 hours		
• <b>Sun Protection Measures.</b> Spending time in the sun increases your risk of skin cancer and early skin aging. To decrease this risk, regularly use a sunscreen with a Broad Spectrum SPF value of 15 or higher and other sun protection measures including:		
• limit time in the sun, especially from 10 a.m. - 2 p.m.		
• wear long-sleeved shirts, pants, hats and sunglasses		
• children under 6 months of age: Ask a doctor		
<b>Other information</b>		
• protect the product in this container from excessive heat and direct sun		
<b>Inactive ingredients</b>		
water, isododecane, C12-15 alkyl benzoate, dimethicone, undecane, triethylhexanoin, isohexadecane, styrene/acrylates copolymer, nylon-12, caprylyl methicone, butyloctyl salicylate, phenethyl benzoate, silica, tridecane, dicaprylyl carbonate, dicaprylyl ether, talc, dimethicone / PEG-10/15 crosspolymer, aluminum stearate, pentylene glycol, PEG-9 polydimethylsiloxylethyl dimethicone, iron oxides, alumina, polyhydroxystearic acid, phenoxyethanol, magnesium sulfate, propylene glycol, caprylyl glycol, aluminum hydroxide, PEG-8 laurate, stearic acid, disodium lauroyl glutamate, PEG-9		
<b>Questions or comments?</b>		
1-888-LRP-LABO 1-888-577-5226		
Monday - Friday (9 a.m. - 5 p.m. EST)		
858202 5		
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# SUNSCREEN LABELS EXPLAINED



## References:

1. U.S. Food and Drug Administration. Consumer Updated: FDA Sheds Light on Sunscreens. Last Updated: May 27, 2016. <http://www.fda.gov/forconsumers/consumerupdates/ucm258416.htm>
2. Petersen B, Wulf HC. Application of sunscreen—theory and reality. *Photodermatol Photoimmunol Photomed*. 2014;30(2-3):96-101.





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THANK YOU

