The trends of Portugal's 100 most popular sunscreens: A Cosmetic Consumer Profiling Study

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1. Introduction

Due to its high exposure compared to other organs, the skin is highly susceptible to physical aggressions. Among these stressors, ultraviolet (UV) radiation is particularly significant, as it is the leading cause of photoageing, sunburn, skin sensitisation, and malignancies such as skin cancer.

With the **rise of an ageing population** and **increasing health literacy**, the **use of sunscreens is becoming more prominent**. No longer reserved solely for beach outings, sunscreens are increasingly recognised as essential cosmetic products for daily use.

2. Aim

Present a comprehensive and up-to-date overview of the **100 most popular sunscreens available on the Portuguese market**.

3. Materials and Methods

Top 100 best-selling sunscreens in Portugal → identified using the **IQVIA® database** → **N=** 110 products

Based on:

- Sales until march 2025 were herein considered → cutoff 100,000 units sold
- Solely products available in pharmacies and para pharmacies were regarded;

The data was subsequently organised according to the following parameters

1. UV filters
2. dosage forms
3. excipients and their functions
4. natural ingredients
5. leading commercial brands in the market

4. Results & Conclusions

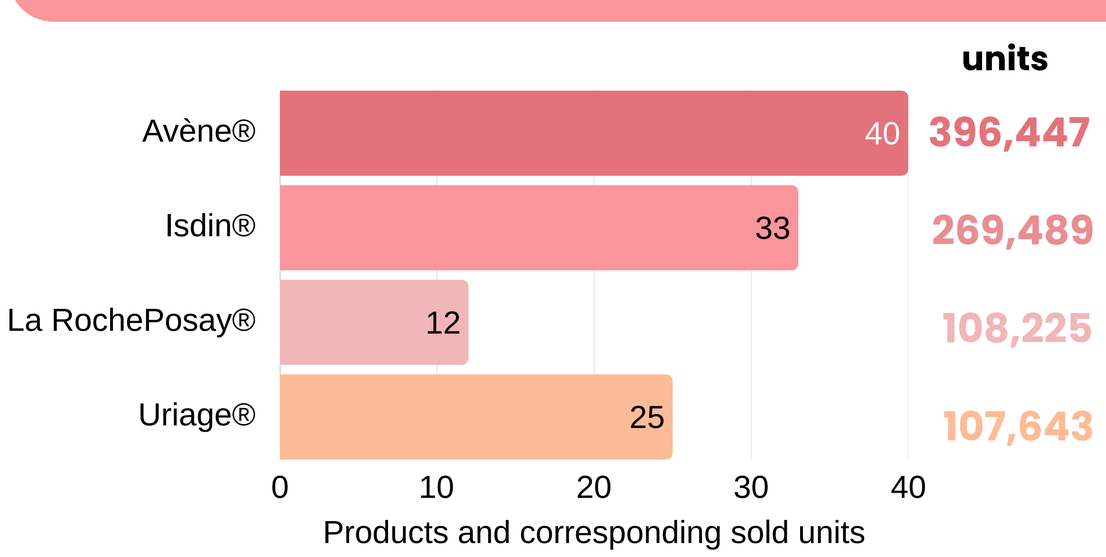
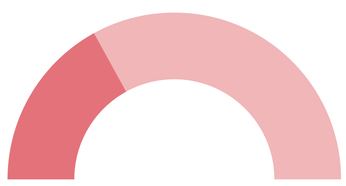


Figure 1 : Top four cosmetic brands in the sunscreen market, corresponding products and units sold

Nº1
Fluid sunscreens (35.5%)



Others: traditional creams, lotions, and stick formulations.

Figure 2 : Consumers preferred dosage form

Formulations

- **Top humectant excipient:** Glycerin ↔ **62%**
  Followed by: caprylyl glycol and panthenol
- **Top 4 UV filters:**
  (i) diethylamino hydroxybenzoyl hexyl benzoate;
  (ii) ethylhexyl triazone;
  (iii) phenylene bis-diphenyltriazine;
  (iv) bisethylhexyloxyphenol methoxyphenyl triazine

all from the new generation of chemical sunscreens, available in Europe. → Regulation (EC) Nº1223/2009, Annex VI

25 organic UV filters in EU **VS** 16 filters approved by FDA

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E.g.; Zinc Oxide and Titanium Dioxide, only present in **7 products** and **3 brands**

Natural Ingredients

All analysed sunscreens included botanical ingredients, valued for both consumer appeal and functional benefits.

INCI Name	Common Name	Number of products	Function/Benefit
Helianthus annuus (L.) seed oil	Sunflower seed oil	19	Moisturising, antioxidant properties
Oryza sativa (L.) starch	Rice starch	18	Absorbs oil, softens skin
Butyrospermum parkii	Shea butter	12	Enhances SPF (↑ 35%), improves photostability
Spirulina Platensis	Spirulina	11	Antioxidant, protects against UV-induced damage
Cera Alba	Beeswax	8	Emollient; improves water resistance and texture

- Reef protection
- Botanical ingredients
- Increased SPF
- Fewer chemical filters

5. Conclusions

This comprehensive overview supports healthcare and industry professionals in identifying key formulation trends, consumer preferences, and emerging demands in the Portuguese sunscreen market, enabling more targeted and informed product development.

References INCI Decoder. https://incidecoder.com/ , Environmental Working Group.| EWG https://www.ewg.org/