



HERBAROM[®]
COLORING
APPLE EXTRACT

AT A GLANCE

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KEY FACTS

Herbarom® stands for consistent brown coloring – specifically developed to meet the needs of modern R&D teams in the food industry.

01 WHAT IS HERBAROM®?

Herbarom® is an apple extract that imparts flavor and color, derived from freshly juiced and gently dried apples. In addition to the sugars naturally found in apples – fructose, glucose, and sorbitol – **Herbarom®** contains the flavor and color components of the apple.



Depending on the type and dosage, the color spectrum of **Herbarom®** ranges from a golden yellow to a medium brown to a dark brown hue. To achieve a more intense brown color while reducing sugar content, low-sugar variants have been developed: **Herbarom® AF 24-SR** and **Herbarom® AF 24-SR-M30** in powder form achieve strong coloration with only tiny amounts.

Through careful selection of raw materials and controlled manufacturing processes, the goal is to achieve a consistent color effect that enables use in industrial development and production processes. **Herbarom®** is thus to be understood as a food product in its own right for coloring purposes.



02 DISTINCTION FROM OTHER APPLE-BASED COLOR SOURCES



Unlike apple juice and apple concentrates, the focus is not on the typical flavor or sweetness of the apple, but on the targeted use of color-giving compounds – polyphenols.

Even when compared to non-standardized apple products, **Herbarom®** offers clear advantages for R&D applications. While apple juice or concentrates often exhibit significant variations in color and intensity, **Herbarom®** is designed to deliver reproducible color characteristics. This facilitates its use both in the early product development phase and during later scale-up, as color targets can be achieved consistently.

	Odour	Taste
Savoury	● ● ●	● ● ●
Roasted	● ● ●	● ● ●
Sweet	—	● ● ●
Bitter	—	● ● ●

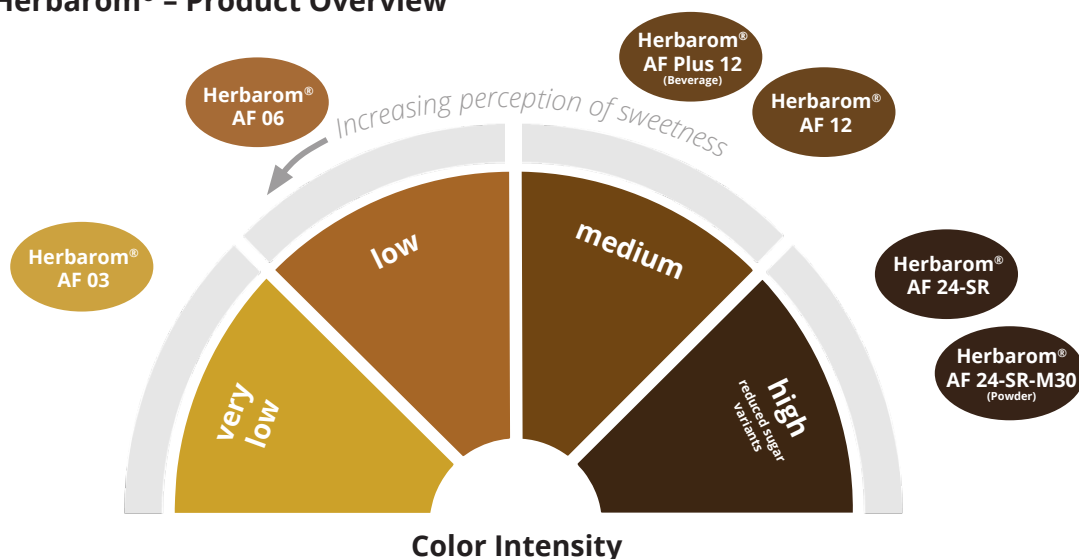
Thanks to its natural, fruit-specific properties, **Herbarom®** offers a wide range of applications. The fruit’s own flavor components, combined with its characteristic acidic notes, help round out the flavor profile.

- Classification of the scale
- ● ● Very regonizable
 - ● ● Clearly regonizable
 - ● ● Weakly regonizable
 - Not considered

03 COLOR CHARACTERISTICS AND BEHAVIOR

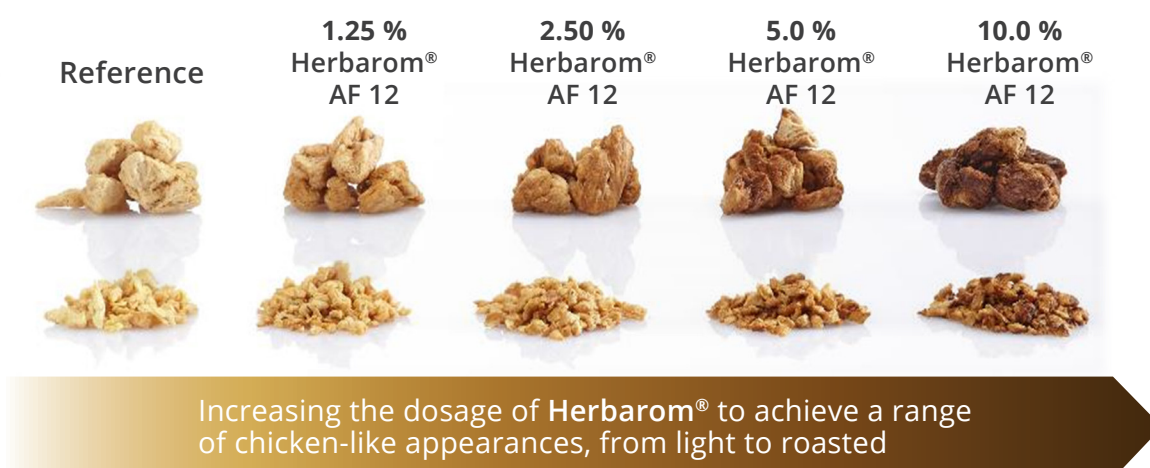
Herbarom® produces natural shades ranging from golden yellow to deep brown, the intensity of which can be precisely adjusted depending on the dosage. The color effect can be controlled linearly, allowing for precise adjustment to the desired shade. For R&D, the reproducibility of color intensity at comparable dosages is a key advantage.

Herbarom® – Product Overview



Herbarom® in plant-based meat alternatives

→ Soy granules



04 BEHAVIOR IN THE FOOD MATRIX

The color effect of **Herbarom**® depends on the specific food matrix. Factors such as water content, formulation composition, and the presence of other ingredients influence the visual perception of the color. In aqueous systems, the color is distributed evenly, requiring a significantly lower dosage, whereas more complex or denser matrices require a higher dosage.





Herbarom® in savory products

➔ BBQ-Sauce



Increasing the dosage of Herbarom® to achieve shades ranging from reddish-brown to smoky BBQ sauce colors

05 STABILITY UNDER PROCESS CONDITIONS



pH-behavior

Herbarom® exhibits stable color behavior in acidic to neutral systems, as is typical in many food applications. Changes in pH do not significantly affect color intensity – pH adjustments during the development process can be accommodated without any problems.



pH-range 3-7

For R&D, this means that **Herbarom®** is particularly well-suited for products where the color should not be affected by the pH level.

Baking/Heating Process

Pasteurization, baking processes, and extrusion: **Herbarom®** retains its color characteristics even under thermal stress – making it ideal for industrial processing.



Herbarom®
Coloring Apple Extract
Watch the video



Turbidity

Turbidity can be largely controlled through the selection of raw materials and processing methods, making it possible to use the product in clear beverages and base ingredients. Suitability depends largely on the specific formulation and process parameters and should be evaluated during the development phase.

06 BENEFITS FOR R&D AND PRODUCTION

From a research and development perspective, **Herbarom®** offers several significant advantages:

- easy and precise dosing,
- seamless integration into existing formulations,
- reproducible color targets across various development stages,
- support for efficient development and scale-up processes in production.

These properties help shorten development times and minimize color deviations at the later production scale.



PRECISE DOSING

Precisely controllable color intensity for simple R&D applications.



REPRODUCIBLE COLOR TARGETS

Consistent results with minimal batch-to-batch variations.



EFFICIENT SCALE-UP PROCESSES

Rapid development and reliable transfer to production.



SEAMLESS INTEGRATION

Easily integrable into existing formulations and processes.

07 YOUR BENEFITS AT THE **GLANCE**

Herbarom® supports your research and development department in implementing natural brown color concepts. Reliable reproducibility is achieved through standardized color intensity, controllable behavior under various pH and temperature conditions, and good applicability in different matrices.



CLEAN LABEL

Labeled as “apple extract”, FSSC 22000 certified, FDA registered. Vegan, halal, and kosher certified.



HEAT-RESISTANT

Suitable for pasteurization, baking processes, and extrusion without significant color changes.



STANDARDIZED

Standardized color intensity for reproducible results from the laboratory through to mass production.



pH-STABLE

Stable color behavior in acidic to neutral systems (pH 3–7) without significant color change.



HIGHLY FUNCTIONAL DIETARY FIBERS AND APPLE EXTRACTS

Herbafood Ingredients GmbH is a pioneer in the field of multifunctional ingredients for the food industry and offers a comprehensive range of functional dietary fibers, with a focus on fruit-derived fibers such as citrus fibers and apple fibers.

