

DermaLab Colori Probe



Colori Probe

With Colori technology from Cortex, you are able to instantly measure melanin, erythema, color and skin type (ITA) - all in one device.

Skin color is primarily influenced by melanin, a pigment produced by melanocytes that absorbs harmful UV radiation and provides natural protection. Changes in skin color often occur due to damage, aging, or targeted treatments. The Colori Probe enables precise measurement of these changes, supporting effective interventions.

Technology

The Cortex Colori measurement is based on diffuse reflectance spectroscopy and the measurement aperture is 8 mm.

The individual typology angle (ITA°) is determined by analysis of spectrophotometric data to classify skin phototypes objectively into 6 physiologically relevant groups: very light, light, intermediate, tan, brown, and dark.

The melanin index (M) is an objective measure of skin pigmentation. The calculation is based on the diffuse reflectance centered at 680 nm where melanin is the predominant absorbing chromophore and the interference from hemoglobin is minimal.

Erythema can be expressed as an index of hemoglobin relative to melanin.

The Colori technology is available as stand-alone (DSM-4) and as part of the multiparameter DermaLab unit.

Specifications

- 45°/0° Colorimeter with full visible spectrum color sensor
- 60° specular gloss (GU) measurement
- Light source: 4 x D65 LED illuminants with CRI > 98
- Color space: CIE XYZ, L*a*b*, L*C*h, sRGB
- Pigmentation (melanin): 0.0 – 99.9
- Erythema (redness, hemoglobin): 0.0 – 99.9
- Photo type classification: Individual Typology Angle (ITA)
- Color difference: $\Delta E_{ab} < 2$ and $\Delta E_{00} < 1$
- 60° specular gloss (GU) measurement
- Measurement aperture: 8 mm
- Measurement area: 50 mm²
- Special correction matrix optimised for skin
- Portable calibrator

Benefits

- Instant measurement within 1 sec.
- Userfriendly design.
- Very easy to operate.
- High-quality materials and metal enclosure provides a very robust construction.
- 4 simultaneous skin color measurements with 1 instrument.
- The colori probe is supplied with a calibrator allowing the user to ensure great results.
- High accuracy and precision.

APPLICATION

An objective skin color and numerical classification based on measurable skin reflectance (ITA) is essential in several different contexts, from aesthetic treatments to research.

The skin's color originates from melanin, which is a pigment produced by melanocytes. The more melanin, the darker the skin color. In the skin, melanin absorbs ultraviolet light and thus helps to protect us from harmful UV.

In case of damage to the skin, it is very common for the skin to change color.

Application areas

The application areas for the Colori Probe are many, including:

- Anti-aging products
- Anti-redness treatments and products
- Anti-brown spots
- SPF testing
- Self-tanner products
- Whitening products and treatments
- Laser treatments
- Depigmentation
- Dark areas near eye

The Colori Probe

is one of 11 parameters available for the customizable skin analysis tools: The DermaLab Combo and the DermaLab Mini.

To learn more about our solutions, visit cortex.dk

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