

Colorimeter DSM-IV



DSM-IV

With colori technology from Cortex, you can instantly measure melanin, erythema, color and skin type (ITA) - all in one device. The DSM-IV enables precise measurement of skin color changes, supporting effective interventions.

Technology

The DSM-IV measurement is based on diffuse reflectance spectroscopy with an 8 mm measurement aperture.

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 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.

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
- 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 optimized for skin

Benefits

- Modern wireless design
- Instant measurement within 1 sec
- User friendly design with easy operation
- High-quality materials and metal enclosure provides a very robust construction.
- 4 simultaneous skin color measurements with 1 instrument.
- Supplied with a portable calibrator allowing the user to ensure great results

APPLICATION

Skin color is primarily influenced by melanin, a pigment produced by melanocytes that absorbs harmful UV radiation and provides natural protection. Changes in skin erythema often occur due to damage, aging, or targeted treatments.

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

Examples of fields of application with the DSM-IV

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

Note: The DSM-IV is not a medical device and is not intended for medical purposes such as diagnosis or monitoring of skin disease.

The DSM-IV

Is based on the newest technology and is highly recognized in both research studies and in pharmaceutical and cosmetic efficacy testing.

To learn more about our solutions, visit cortex.dk



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