OzScientific

Knowledge-driven Solutions for Dairy & Food Industries

Food Analysis Explained

Food Colour

In the food industry, measurement of food colour can be helpful while comparing the quality of food. Food colour is governed by the chemical, biochemical, microbial, and physical changes which occur during growth, maturation, postharvest handling, processing, and storage. At OzScientific, we have access to food technology and scientific literature and can find the right test for your query.

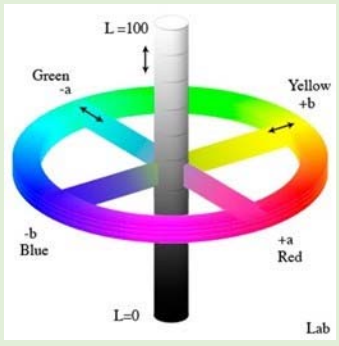


The HunterLab L*a*b* and the modified CIE system called CIELAB color scales are opponent-type systems commonly used in the food industry.

L* = lightness to darkness

a* = greenness to redness

b* = blueness to yellowness



The centre L* axis shows L = 0 (black or total absorption) at the bottom, passing through grey to L = 100 (white).

On a* axis, +a movement represents a shift from green towards red.

On the b* axis, +b movement represents a shift from blue towards yellow

How we work

- Commercial
- Confidential
- Agreed project scope
- Client oriented
- Understand timelines

Our facilities

- Pilot plant for small scale concept products
- Product development lab
- Food analysis lab
- Meeting room
- Cold rooms and incubators

Our clients

- Dairy companies
- Artisan food manufacturers and start ups
- Beverage companies with novel product or technology ideas
- Nutraceutical manufacturers
- Manufacturers of baked goods and breads
- Processors of proteins from dairy and plants

Contact Us

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Minolta Chromameter CR-300

At OzScientific, food colour is measured by Minolta Chromameter CR-300.

The measuring head of the CR-300 uses diffuse illumination/0° viewing geometry (specular component included) to provide measurements of a wide variety of surfaces which correlate well with colour as seen under diffuse lighting conditions. A pulsed xenon arc (PXA) lamp inside a mixing chamber provides diffuse, uniform lighting over the 8 mm diameter specimen area. Only the light reflected perpendicular to the specimen surface is collected by the optical-fibre cable for colour analysis

Application Note

Shelf life analysis of demineralised whey powders

In this project, we measured shelf of whey powders and one of the parameters measured was the colour. Samples were stored at 30, 40 and 50°C. The colour results showed the onset of Maillard browning which was related to the storage conditions.