

# Lovibond® Colour Measurement Tintometer® Group



## TA 4 Online-System

Continuous, Online Colour Measurement for Precise Process Control



- Continuous, online colour measurement for precise process control
- Flexibility through full range of industry-standard colour scales
- Seamless integration into production process - correlation with other instruments
- Eliminates time-loss and cost for sampling and lab measurements

Part Number: 178109

### Seamless Integration into Production Process - Correlation with Other Instruments

The Lovibond® TA 4 online system enables you to instantly monitor colour quality throughout the manufacturing process. It is designed to be an easy-to-use monitoring system with the accuracy guaranteed of the Lovibond® brand.

### Eliminates Time-loss and Cost for Sampling and Lab Measurements

The online system provides objective colour data for continuous process control, allowing near real-time process information to be obtained at a low analytical cost. The system can be used for the measurement of constituent concentrations, early detection of trace contaminants and quality assurance analysis. Analytical results can be fed back for automatic process control and optimisation.

### Be Compliant to Internationally Recognised Colour Coordinate Systems

This new generation of online colorimeters utilise diode array spectrophotometers which measure a near real-time response across the spectrum (380 to 780 nm) at 10 nm or less. This spectrophotometric approach allows for the use of internationally recognised colour coordinate systems, such as CIELAB and CIE xzY with the subsequent translation of colour data to industry specific colour scales, as referenced by standardising bodies such as AOCS, DGF, ISO and ASTM.

### Enjoy Ease-of-Use with Touch Screen Input and Display of Graphs

The interactive setup screen allows you to program details of both the reference spectrophotometer and those of the three flow cells. Once in deployment, the display can be set to show different measuring

points and the output scale can be selected. You can view the colour scales in two formats: either as a real-time graph for a single scale at a chosen measurement point or as a set of the latest values for all the scales at all the measurement points.

### Facilitates Multiple Measurement Locations Throughout The Plant

The assembly consists of a Central Control Unit with a reference spectrophotometer. The Control Unit can accept signals from up to 3 flow cells to each of which up to 4 remote signals eg red, yellow, chlorophyll and CIELAB L\* can be connected. The Central Control unit may be housed in a central location up to 45 m away from each cell.

There is no limit as to how many configurations you may install in the plant but each Central Control Unit runs independently and must be monitored separately.

### Get Started with the Lovibond® Team

A team of Lovibond® trained engineers is on-hand to help you get started. With the company's in-depth knowledge of colour science, we can provide advice from colour scales, through recommended path lengths to implementation 'best practice'.

We can also arrange on-site visits to the factory plant for both pre- and post technical meetings, highlighting areas of consideration, advising on implementation and seeing the process through to completion.

## Industry

Chemical Industry | Food and Beverage Industry | Industries Others | Oil and Gas | Pharmaceutical Industry

## Application

Chemicals | Edible Oils and Fats

## TA 4 Online-System

This generation of online colorimeters measures a near real-time response across the spectrum (380 to 780 nm) or less. This spectrophotometric approach allows for the use of internationally recognised colour coordinate systems, such as CIELAB and CIE xzY with the subsequent translation of colour data to industry specific colour scales, as referenced by standardising bodies such as AOCS, DGF, ISO and ASTM.

## Technical Data

<b>Applicable Standard</b>	AOCS Cc 8d-55 AOCS Cc 13a-43 AOCS Cc 13b-45 AOCS Cc 13e-92 AOCS Cc 13j-97 ASTM D1209 ASTM D1544 ASTM D6166 ASTM E308 BS684 ISO 6271 ISO 15305 ISO 27608 MS 252 : Part 16 MS 817 : Part 12
<b>Color Type</b>	Transparent
<b>Display</b>	Embedded PC with touch screen display, internal hard drive Windows XP operating system
<b>Path Length</b>	1 inch, 50 mm, 5 1/4 inch
<b>Calibration</b>	Calibration loop filled with food grade glycerol, automatic calibration program included with software
<b>Internal Storage</b>	100,000+ Measurement
<b>Measurement Time</b>	Less than 5 seconds (depending on length of fiber optic cable)
<b>Spectral Range</b>	320 - 780 nm
<b>Illuminants</b>	CIE Illuminant A
<b>Portability</b>	Process
<b>Observer</b>	2°, 10°
<b>Dimensions</b>	500 x 500 x 300 mm

## Delivery Scope

Please contact your local Lovibond® representative for details.

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