# 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 industrystandard 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 Inupt 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

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### **Technical Data**

App	licab	le Sta	ındard
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AOCS Cc 8d-55 AOCS Cc 13a-43 AOCS Cc 13b-45 AOCS Cc 13e-92 AOCS Cc 13e-92 AOCS Cc 13e-92 ASTM D1209 ASTM D1544 ASTM D6166 ASTM E308 BS684 ISO 6271 ISO 15305 ISO 27608 MS 252 : Part 16 MS 817 : Part 12

	MS 817 : Part 12	
Color Type	Transparent	
Display	Embedded PC with touch screen display, internal hard drive Windows XP operatin system	
Path Length	1 inch, 50 mm, 5 1/4 inch	
Calibration	Calibration loop filled with food grade glycerol, automatic calibration program included with software	
Internal Storage	100,000+ Measurement	
Measurement Time	Less than 5 seconds (depending on length of fiber optic cable)	
Spectral Range	320 - 780 nm	
Illuminants	CIE Illuminant A	
Portability	Process	
Observer	2°, 10°	
Dimensions	500 x 500 x 300 mm	

# **Delivery Scope**

Please contact your local Lovibond® representative for details.

### Tintometer GmbH

Lovibond® Water Testing Schleefstraße 8-12 44287 Dortmund Tel.: +49 (0)231/94510-0 sales@lovibond.com www.lovibond.com Germany

### **Tintometer Brazil**

Caixa Postal: 271 CEP: 13201-970 Jundiaí - SP Tel.: +55 (11) 3230-6410

sales@lovibond.us www.lovibond.com.br

Brazil

### The Tintometer Limited

Lovibond House Sun Rise Way Amesbury, SP4 7GR Tel.: +44 (0)1980 664800 Fax: +44 (0)1980 625412 sales@lovibond.uk www.lovibond.com

### Tintometer Inc.

UK

USA

6456 Parkland Drive Sarasota, FL 34243 Tel: 941.756.6410 Fax: 941.727.9654 sales@lovibond.us www.lovibond.us

#### **Tintometer China** 9F, SOHO II C. No.9 Guanghualu,

Chaoyang District, Beijing, 100020 Customer Care China Tel.: 4009021628 Tel.: +86 10 85251111 Ext. 330 Fax: +86 10 85251001 chinaoffice@tintometer.com www.lovibond.com China

### Tintometer India Pvt. Ltd.

Door No: 7-2-C-14, 2nd, 3rd & 4th Floor Sanathnagar Industrial Estate, Hyderabad, 500018 Telangana Tel: +91 (0) 40 23883300 Toll Free: 1 800 599 3891/3892 indiaoffice@lovibond.in

www.lovibondwater.in

India

Postbox: 24047 08080 Barcelona Tel.: +34 661 606 770 sales@tintometer.es www.lovibond.com Spain

Tintometer South East Asia

Klang, 41200, Selangor D.E.

Tel.: +60 (0)3 3325 2285/6

lovibond.asia@tintometer.com

Fax: +60 (0)3 3325 2287

www.lovibond.com

**Tintometer Spain** 

Malaysia

Unit B-3-12, BBT One Boulevard,

Lebuh Nilam 2, Bandar Bukit Tinggi,

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