# Lovibond® Colour Measurement

# Tintometer® Group



# Model Fx

Accurate Measurement of the Colour of Edible Oils at the Correct Temperature



- Avoid misreading from crystallisation
- Measures Lovibond® RYBN, Lovibond RY10:1, AOCS RY, Chlorophyll & b-Carotene
- Allows the Measurement of Hot Samples (Integrated Heater)
- Ensured Compliance to Standards

Part Number: 169200

## Avoid Misreading from Oil Crystallisation

Many edible oils are unique in their fractionation – resulting in different melting points for different applications.

This makes the sample temperature, and sample heating to maintain the temperature during measurement, more important since temperature and colour go hand in hand.

Temperature and duration times must be accurately set to ensure heating to the full liquid phase for measurement, while bearing in mind that overheating can cause the oil to turn darker. Microwave heating is faster but may not result in uniform temperatures of the oil. The integrated heater also allows the measurement of hot samples and keeps the samples at their ideal temperature.

# Save Costs, Misinterpretation and Potential Disputes

The Model Fx also reports the temperature at which the sample was measured. Should any disagreement occur between supplier and customer, this additional unique functionality can help dissolve any dispute, thereby saving time and costs. Currently, non-repetitive analysis across refineries is still an issue.

### Ensures You Are Compliant to Standards

The Model Fx measures according to the Lovibond® RYBN, Lovibond RY10:1, AOCS RY, Chlorophyll & b-Carotene scales which are most commonly used in the Edible Oil Industry. Being able to report according to these standards means that you are compliant to the internationally accepted methods.

#### Ideal for Continual Use in Edible Oil Refineries

The Model Fx is housed in robust, chemically-resistant aluminium casing (100% recyclable and sustainable).

The sealed unit and removable sample chamber are easy to clean of any accidental oil spillages to avoid any impact on accuracy.

#### Industry

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

#### Application

Edible Oils and Fats

#### Model Fx

The Lovibond® Model Fx solves the problem of measuring the colour of edible oils with its unique ability to not only keep the oil at a constant temperature but also to measure and report on the temperature of the sample, avoiding any misreading from crystallisation. You can now measure edible oils in their natural and correct state without any risk of the sample's temperature affecting the results. The Model Fx measures according to the following standards: Lovibond® RYBN, Lovibond RY10:1, AOCS RY, Chlorophyll & b-Carotene

#### **Technical Data**

Applicable Standard

AOCS Cc 8d-55 AOCS Cc 13b-45 AOCS Cc 13d-55 AOCS Cc 13g-92 AOCS Cc 13j-97 BS684

BS684 Section 2.20

	Chinese GB/T 22460-2008 ISO 15305
Colour Type	Transparent
Wavelength Range	380 - 780 nm
Wavelength Accura- cy	0.2 nm
Spectral Scope	< 15 nm
Photometric Range	0 - 100 % T
Photometric Linearity	± 0.01 % T
Stray Light	< 0.01 % T
Interfaces	USB RS 232
Detector	Spectrometer
Instrument Housing	Aluminium
Repeatability	± 0.5 % T
Portability	Benchtop
Touchscreen	No
Input Voltage	Универсальный через внешний источник питания
Environmental Con-	Temperature: +5°C - 40°C ; Humidity: Up To 90 %
ditions	non condensing
Stock Conditions	
	non condensing  Temperature: -20°C - 85°C; Humidity: Up To 90 %
Stock Conditions	non condensing  Temperature: -20°C - 85°C; Humidity: Up To 90 % non condensing
Stock Conditions  Compliance  Languages User In-	non condensing  Temperature: -20°C - 85°C; Humidity: Up To 90 % non condensing  CE  English, German, French, Spanish, Italian, Por-

# **Delivery Scope**

- Model Fx instrument
- External power supply
- Set of 3 power leads (UK, European and United States)
- Quick start guide (hard copy)
- USB memory stick (containing the manuals)
- Conformance filter
- W600/B/1" cell (Borosilicate, 1" path length)
- W600/B/51/4" cell (Borosilicate, 51/4" path length)

#### Accessories

Title	Part Num- ber
W600/B/10 Borosilicate Glass	655960
W600/B/25 Borosilicate Glass	655990
W600/B/33 Borosilicate Glass	656010
W600/B/40 Borosilicate Glass	656020
W600/B/100 Borosilicate Glass	656030
W600/B/1/16" Borosilicate Glass	656044
W600/B/1/8" Borosilicate Glass	656054
W600/B/1/4" Borosilicate Glass	656064
W600/B/1/2" Borosilicate Glass	656074
W600/B/1" Borosilicate Glass	656080
W600/B/2" Borosilicate Glass	656090
W600/B/3" Borosilicate Glass	656104
W600/B/4" Borosilicate Glass	656114
W600/B/5" Borosilicate Glass	656124
W600/B/5 1/4" Borosilicate Glass	656130
W600/B/50 Borosilicate Glass	656200

#### Tintometer GmbH

Lovibond® Water Testing Schleefstraße 8-12 44287 Dortmund Tel.: +49 (0)231/94510-0 Fax: +49 (0)231/94510-30 sales@lovibond.com www.lovibond.com Germany

#### **Tintometer China**

Room 1001, China Life Tower 16 Chaoyangmenwai Avenue, Beijing, 100020 Tel.: +86 10 85251111 App. 330 Fax: +86 10 85251001 chinaoffice@tintometer.com www.lovibond.com China

#### Tintometer Inc.

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

### 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 South East Asia

Unit B-3-12, BBT One Boulevard, Lebuh Nilam 2, Bandar Bukit Tinggi, Klang, 41200, Selangor D.E Tel.: +60 (0)3 3325 2285/6 Fax: +60 (0)3 3325 2287 lovibond.asia@tintometer.com www.lovibond.com Malaysia

#### Tintometer India Pvt. Ltd.

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

#### Tintometer AG

Hauptstraße 2 5212 Hausen AG Tel.: +41 (0)56/4422829 Fax: +41 (0)56/4424121 info@tintometer.ch www.tintometer.ch Switzerland

#### Tintometer Brazil Caixa Postal: 271

Caixa Postal: 271 CEP: 13201-970 Jundiaí – SP Tel.: +55 (11) 3230-6410 sales@tintometer.com.br www.lovibond.com.br Brazil

#### Tintometer Spain

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

Technical changes without notice
Printed in Germany
Lovibond® and Tintometer® are Trademarks of the Tintometer Group of Companies