## Lovibond® Colour Measurement

## Tintometer® Group





- Automatic Colour Measurement for the Edible Oils Market
- Measures Lovibond® RYBN, Lovibond RY10:1, AOCS RY, Chlorophyll & β-Carotene
- Ensures Compliance to Standards
- Allows the Measurement of Hot Samples (Integrated Heater)
- Reports Oil's Sample Temperature to Avoid Misreadings from Crystallisation
- Simple to Operate with Integrated Help Menus
- Robust, Chemically Resistant Housing for Continual Use in Edible Oil Refineries
- Aluminium Casing 100% Recyclable and Sustainable
- Sealed Unit & Removable Sample Chamber (Oil Spillages will Not Impact Accuracy)
- New Technology Giving High Resolution, Repeatability, Reliability and Accuracy



The increasing trend of oil usage worldwide and the resultant effect on price fluctuations is driving the need for more accurate analysis within the supply chain. Non-repetitive analysis across refineries, however, is still an issue.

Many edible oils are also 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.

Further, due to the high melt temperature, certain oils shorten very quickly: as soon as the temperature is removed, they start to solidify, visually turning the sample increasingly whiter.



"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 misreadings from crystallization."

Technical Specifications		
Measurement Method	Spectrometer	
Lamp Source	Tungsten Halogen	
Wavelength Range	380 - 780nm	
Photometric Measuring Range	0 - 100% T	
Wavelength Accuracy	0.2nm	
Spectral Bandwidth	< 15nm	
Photometric Linearity	± 0.01% T	
Wavelength Selection	Software	
Stray Light	< 0.01% T	
Repeatability	± 0.5% T	
Detectors	Spectrometer	



Physical & Environmental Specifications		
Enclosure	Aluminium	
Dimensions	301mm w x 152mm h x 331mm d	
Weight	5.16Kg	
Environmental Conditions (operating)	Humidity: Up To 90% non condensing Temperature: +5°C to +40°C	
Environmental Conditions (storage)	Humidity: Up To 90% non condensing Temperature: -20°C to +85°C	

Additional Technical Data	
Input Voltage	Universal via External Power Supply
Interface	USB, RS232
Certification	CE
Languages	English, French, German, Italian, Spanish, Portuguese, Russian, Japanese, Chinese

Standards Compliance	
Lovibond® RYBN	AOCS Cc 13e, AOCS Cc 13j, ISO 15305, MS 252: Part 16, IP17 Method A
Lovibond RY10:1	Chinese GB/T 22460-2008 Standard adopted from the ISO 15305-1998
AOCS RY	AOCS Cc 13b-45 the Wesson Method, AOCS Cc 8d-55, AOCS Cc 13j-97
Chlorophyll	AOCS Cc13d-55
β-Carotene	BS 684 Section 2.20

Order Code	Product
169200	Lovibond® Model Fx

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