

Lovibond® Colour Measurement Tintometer® Group



Gardner Comparator (AF228)

Gardner Scale, 3-Field Visual Measurement



- Compact, Visual Measurement System for Single Scale Measurements
- Self-Contained, Includes Everything Needed to Measure the Scale
- Easy-To-Use, Fast & Accurate
- 3-Field Viewing for Optimum Accuracy

Part Number: 345010

Accurate Determination of the Gardner Scale

The AF 228 incorporates 18 glass standards which make up the scale in a pair of discs

Fast Determination of Colour Value

You can directly compare the sample with the colour values for quick results.

Easy to Achieve Optimum Colour Accuracy

The advantage of a 3-section field of view is that the sample and two consecutive glasses on the colour scale are viewed simultaneously, making it easier and quicker for you to achieve the ideal colour match.

Facilitates Tolerance Level Setting

For rapid colour grading within predetermined colour limits, the glass standards can be set to the two limiting colours so that it is easy to check that the sample is within tolerance.

Guaranteed Constant Lighting Conditions

In the instruments, the tungsten halogen light source is colour corrected to CIE standard illuminant C*, which guarantees constant lighting conditions for colour grading.

Compliance to Standards

Each Comparator 3000 is supplied with the correct cells for the appropriate path length determined by the standard.

Industry

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

Application

Chemicals | Edible Oils and Fats | Petroleum Oils and Waxes

Gardner Comparator (AF228)

A 3-field instrument for visually determining the colour of petroleum oils & waxes, chemicals and edible oils & fats samples according to the Gardner scale by direct comparison with coloured glass filters.

Technical Data

Applicable Standard ASTM D1544
ASTM D6166

Colour Type Transparent

Portability Benchtop

Delivery Scope

- **Comparator 3000**
- **2 x Glass Discs**
 - 4/30-1 (left hand) 1, 3, 5, 7, 9, 11, 13, 15, 17
 - 4/30-2 (right hand) 2, 4, 6, 8, 10, 12, 14, 16, 18
- **2 x Test Tubes 10.65mm diameter**

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
UK

Tintometer South East Asia

Unit B-3-12, BBT One Boulevard,
Lebu 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, 2nd, 3rd & 4th 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

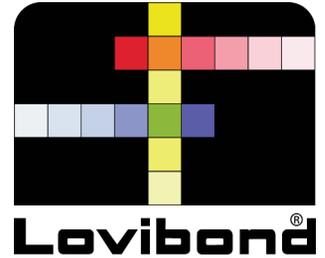
Caixa Postal: 271
CEP: 13201-970
Jundiaí – SP
Tel.: +55 (11) 3230-6410
sales@tintometer.com.br
www.lovibond.com.br
Brazil

Tintometer Spain

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

Lovibond® Colour Measurement

Tintometer® Group



Comparator 3000

Visual Colour Grading

3-Field determination with Comparator 3000



Lovibond® Comparator 3000

3-field Colour Grading

Visual Grading of Gardner, FAC or US Naval Stores Rosin Colour Scales

Single scale, 3-field instruments for visual colour grading by direct comparison between the sample and Lovibond® glass colour standards housed in a pair of discs. The advantage of a 3-section field of view is that the sample and two consecutive glasses on the colour scale are viewed simultaneously, making it easier to achieve the optimum colour match. For rapid colour grading within predetermined colour limits, the glass standards can be set to the two limiting colours so that it is easy to check that the sample is within tolerance. Versions of the Comparator 3000 are available for the Gardner, FAC and US Naval Stores Rosin Colour scales, each supplied with the appropriate range of coloured glass filters. In the instruments, the tungsten halogen light source is colour corrected to CIE standard illuminant C, which guarantees constant lighting conditions for colour grading. In the EBC version, the C filter is replaced by the B filter as required by the standards. Samples are measured in clear glass tubes or Rosin cells as appropriate.

Version	Colour Scale	Range	Path length
AF228	Gardner Colour	1 - 18	10 mm
AF229	FAC Colour	1 - 45 (odd numbers)	10 mm
AF670	Rosin, US Naval Stores	XC - D	7/8"
AF607	EBC, European Brewing Convention	2-27 units	25mm



Lovibond® Gardner Comparator 3000

A single scale, 3-field instrument for visual colour grading by direct comparison between the sample and Lovibond® glass colour standards housed in a pair of discs. The advantage of a 3-section field of view is that the sample and two consecutive glasses on the colour scale are viewed simultaneously, making it easier to achieve the optimum colour match.

A single scale, 3-field instrument for visual colour grading by direct comparison between the sample and Lovibond® glass colour standards housed in a pair of discs. The advantage of a 3-section field of view is that the sample and two consecutive glasses on the colour scale are viewed simultaneously, making it easier to achieve the optimum colour match. For rapid colour grading within predetermined colour limits, the glass standards can be set to the two limiting colours so that it is easy to check that the sample is within tolerance. The tungsten halogen light source is colour corrected to CIE standard illuminant C*, which guarantees constant lighting conditions for colour grading. The samples are measured in 10.65 mm diameter clear glass tubes.



* In the EBC version, the C filter is replaced by the B filter as required by the standards.

The Tintometer Ltd
T: +44 (0)1980 664800
F: +44 (0)1980 625412

Tintometer Inc
T: +1 941 758 8671
F: +1 941 727 9654

Tintometer - China
T: +86 10 8525 1111 Ext 330
F: +86 10 8525 1001

Tintometer - South East Asia
T: +603 3325 2286
F: +603 3325 2287

Tintometer India Pvt. Lt.
T: +91 (0) 40 4647 9911
Toll Free: 1800 102 3891

Lovibond® & Tintometer® are Registered Trade Marks of The Tintometer Limited. All translations and transliterations of Lovibond® & Tintometer® are asserted as Trade Marks of The Tintometer Limited. Registered in England Number 45024. Registered Office: Lovibond House • UK.

Errors and Omissions Excepted - Content Subject to alterations without notice. Rev 6.

www.lovibondcolour.com