

Lovibond® Colour Measurement Tintometer® Group



AF334

Measure Colour to Gardner Scale (ASTM D1544, ISO 4630) 1 - 18 Units



- Self-Contained Kit to Measure Gardner Colour
- Fast, Economical & Portable Visual Matching
- Two-Field Vision for Accurate Results
- Ability to Guarantee Constant Lighting Conditions

Part Number: 433340

Enables You to Easily Measure Colour According to the Gardner Scale

All you need to do is rotate the disc to get the closest result to the scale.

Fast, Economical & Portable Visual Matching

The Comparator 2000+ is a flexible, modular system for Visual Colour Grading. Using a suitable comparator instrument and glass disc, you can quickly visually match the sample directly against the calibrated, colour stable glass standards.

Two-Field Vision for Accurate Results

Lovibond® comparator instruments include an integrated prism which causes the sample and comparison fields to overlap, allowing enhanced colour discrimination and matching. The prism is ultrasonically sealed to prevent contamination of the optics. Each individually graded glass standard represents a discrete step on the measurement range (as opposed to a continuous graduation), aiding colour discrimination and allowing great accuracy of results.

Ability to Guarantee Constant Lighting Conditions

An optional item for the Comparator 2000+ is the Daylight 2000 Lighting Unit. This is a standardised light source which guarantees you a constant lighting condition for accurate colour grading. This is particularly useful when the sample is very pale in colour. By using a Lovibond® lighting unit, you can be confident of uniform lighting conditions for colour matching, 24 hours a day and irrespective of ambient lighting.

Extended Shelf Life

The unique feature of Lovibond® test discs is that they incorporate coloured glass standards that are colour stable and not affected by UV light or extreme environmental conditions.

Please note, we cannot guarantee compatibility of discontinued Lovibond® Comparator 1000 disks with the Lovibond® 2000+ Comparator.

Industry

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

Application

Edible Oils and Fats | Petroleum Oils and Waxes

AF334

The Two-Field Comparator 2000+ is the easiest way for you to measure against the Gardner Scale and show compliance to standards. It is a useful Quality Control instrument for in-coming and out-going goods. Reliable and repeatable colour test results are key to ensuring final product quality and minimising production costs.

Technical Data

Applicable Standard ASTM D1544
ASTM D6166

Color Type Transparent
Translucent

Portability Portable

Delivery Scope

- 1 x Lovibond 2000+ Comparator
- 1 x Comparator Daylight 2000+
- 1 x 4/30AS Gardner Scale Disc
- 1 x 4/30BS Gardner Scale Disc
- 2 x W680.OG.10mm Cell

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Lovibond® Colour Measurement

Tintometer® Group



Comparator 2000

Flexible System for Visual Colour Grading

Fast, economical & portable visual matching

Lovibond® Comparator System 2000

A flexible, modular system for Visual Colour Grading

Using a suitable Comparator instrument, the sample is visually matched against calibrated, colour stable glass standards in test discs. The Comparator 2000 is a short path length instrument (up to 40 mm) for visually matching samples with relatively dark colours. Nessleriser systems are longer path length instruments for matching a column of sample in a glass cylinder of appropriate path length. They are designed for measuring unsaturated samples that are below the sensitivity of the Comparator 2000. A selection of Lovibond® colour grading discs for use with the Comparator System 2000 is shown below;

| Colour Scale | Disc | Range Covered | Instrument | Accessories Required |
|------------------------|--------|---|--------------------------------|---------------------------|
| ASTM Color | 4/81 | 1, 2, 3, 3.5, 4, 4.5, 5 units ¹⁾ | Comparator 2000+ | 33 mm cell W680/OG/33 |
| | 4/82 | 0.5, 1, 2, 3, 3.5, 4, 4.5 units ¹⁾ | Comparator 2000+ | 33 mm cell W680/OG/33 |
| Dyed Aviation Gasoline | 4/78 | Blue, Green, Brown, Purple (min and max of each) | Nessleriser 2250 | 200 mm cylinders, DB421 |
| | 4/79 | Red (min and max) | Nessleriser 2250 | 200 mm cylinders, DB421 |
| Gardner Colour | 4/30AS | 1, 2, 3, 4, 5, 6, 7, 8, 9 units | Comparator 2000+ | 10 mm cell W680/OG/10 |
| | 4/30BS | 10, 11, 12, 13, 14, 15, 16, 17, 18 units | Comparator 2000+ | 10 mm cell W680/OG/10 |
| Pt-Co/Hazen/APHA | 4/28 | 50, 75, 100, 150, 200, 250, 300, 400, 500 mg Pt/l | Comparator 2000+ | 40 mm cell W680/OG/40 |
| | 4/28A | 200, 225, 250, 300, 350, 400, 450, 500 mg Pt/l | Comparator 2000+ | 40 mm cell W680/OG/40 |
| | NSH | 10, 20, 30, 40, 50, 60, 70, 80, 90 mg Pt/l | Nessleriser 2150 | 113 mm cylinders AF 306/P |
| | NSB | 70, 85, 100, 125, 150, 175, 200, 225, 250 mg Pt/l | Nessleriser 2150 | 113 mm cylinders AF 306/P |
| | NSX | 50, 60, 70, 80, 100, 150, 200, 250, 300 mg Pt/l | Nessleriser 2150 | 113 mm cylinders AF 306/P |
| | CAA | 0, 2.5, 5.0, 7.5, 10, 15, 20, 25, 30 mg Pt/l | Nessleriser 2250 | 250 mm cylinders DB 420 |
| | CAB | 30, 35, 40, 45, 50, 55, 60, 65, 70 mg Pt/l | Nessleriser 2250 | 250 mm cylinders DB 420 |
| | 1209/1 | 0, 2.5, 5.0, 7.5, 10, 15, 20, 25, 30 mg Pt/l | Nessleriser 1209 ²⁾ | 100 ml cylinders DB 423 |
| | 1209/2 | 30, 35, 40, 45, 50, 55, 60, 65, 70 mg Pt/l | Nessleriser 1209 ²⁾ | 100 ml cylinders DB 423 |

Optional Items for Individual Applications

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| Daylight 2000 Lighting Unit | A standardised benchtop light source to guarantee constant lighting conditions for accurate colour grading, particularly when the sample is very pale in colour. |
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¹⁾ Restricted range used by UK MoD for F76 type diesel fuel.

²⁾ Conforms to the path length requirements specified in ASTM D 1209

Test kits based on the Comparator System 2000

Available for the most commonly used colour scales and colorimetric tests, these kits are a convenient means of ordering the complete range of equipment required.



| Type | Colour Scale | Range | Apparatus Included |
|--------|---|------------------|---|
| AF 334 | Gardner Colour | 1 - 18 units | Lovibond® Comparator 2000+ with Daylight 2000 Lighting Unit, Gardner discs 4/30 AS & 4/30 BS, W680/OG/10 mm path length fused glass cell |
| AF 329 | Pt-Co/Hazen/APHA Colour | 0 - 250 mg Pt/l | Nessleriser 2150 with Daylight 2000 Lighting Unit and Nessler cylinders, Nessleriser 2250 upgrade with Nessler cylinders, Pt-Co/Hazen discs CAA, CAB & NSB, stand for using Nessleriser with natural lighting |
| AF 325 | Pt-Co/Hazen/APHA Colour | 10 - 250 mg Pt/l | Nessleriser 2150 with Daylight 2000 Lighting Unit and Nessler cylinders, Pt-Co/Hazen discs NSH & NSB, stand for using Nessleriser with natural lighting |
| AF 328 | Pt-Co/Hazen/APHA Colour, Low Range | 0 - 70 mg Pt/l | Nessleriser 2250 with Daylight 2000 Lighting Unit and Nessler cylinders, Pt-Co/Hazen discs CAA & CAB, stand for using Nessleriser with natural lighting |
| AF 327 | Pt-Co/Hazen/APHA Colour, Low Range, (ASTM D 1209) | 0 - 70 mg Pt/l | Nessleriser 1209 with the Daylight 2000 lighting unit and 100 ml (288 mm) Nessler cylinders, Pt-Co/Hazen discs 1209/1 & 1209/2, deionised water |

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