Lovibond® Colour Instruments

Excellence in colour measurement

Mineral oils, waxes & petrochemicals

Lovibond® PFX995/P

- Saybolt Colour
- ASTM Colour
- Platinum-cobalt
- IP Units
- Gardner Colour
- CIE Values
- Lovibond® RYBN
- Spectral Data

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Lovibond® PFX995/P
High precision spectrophotometer

Comprehensive and Flexible Colour Data

The Lovibond® PFX995/P is a spectrophotometric colorimeter that is designed to meet the colour analysis requirements of petroleum fuels, oils, waxes and petrochemicals. It provides objective, unbiased colour data according to a full range of established industry scales, although the user can easily customise the PFX995/P to display only those scales of interest. Measurements can also be displayed in terms of spectral data and CIE values.

Colour Scales *	Scope	Range	Resolution
Saybolt Colour (ASTM D6045, ASTM D156, JIS K 2580)	Light coloured petroleum products including avaiation fuels, kerosine, naphthas, white mineral oils, hydrocarbon solvents and petroleum waxes	-16 (darkest) to +30 (lightest)	1
ASTM Colour (ASTM D6045, ASTM D1500, JIS K 2580)	A wide range of petroleum products including lubricating oils, heating oils and diesel fuel oils	0.5 - 8 units	0.1
Pt-Co/Hazen/APHA (ASTM D1209)	Clear liquids such as petroleum spirits, solvents and alcohols	0 - 500 mg Pt/l	1
Lovibond® RYBN (IP 17 Method A up to 6" path length)	Petroleum products in terms of Lovibond® Red, Yellow, Blue & Neutral units	0 - 70 Red, Yellow: 0 - 40 Blue; 0 - 3.9 Neutral	-
IP Units (IP 17 Method B)	Light coloured products such as refined undyed motor fuel, white spirit or kerosine	Water White (0.25) to Standard White (4.0)	-
Gardner Colour (ASTM D1544, ASTM D6166)	Chemicals and oils ranging from pale yellow to red, including resins Varnishes, drying oils and fatty acids	1 - 18 units	0.1
CIE Values (ASTM E308)	XYZ Tristimulus values, x y Y Chromaticity coordinates, L*C*h Colour space; CIE L*a*b* Colour space; Hunter L a b Colour space; △E colour difference	Defined by spectrum locus	- 0.01% T,
Spectral data (420 - 710 nm)	Transmittance, optical density (full spectrum & specified wavelengths)	0 - 100% T, 0.25 OD	0.01% T, 0.0001 OD

Brings Precision and Reliability to Colour Measurement

The accuracy, repeatability and reproducibility of data provided by the Lovibond® PFX995/P allow for tighter colour specifications and greater colour consistency, giving companies the confidence needed to make important decisions regarding high value consignments and refining operations. When measuring Saybolt or Pt-Co Colour of clear, water-white products, the long sample path length enables the PFX995/P to obtain precise colour measurements, without multiplying errors.

Colour Analysis made Simple

The Lovibond® PFX995/P is an easy to use, automatic instrument. There is no need to build up calibration curves as they are already established in the instrument. The menu system guides operators through the selection of operating parameters. Thereafter, measurements are initiated by just a single key press and take less than 25 seconds to complete. The PFX995/P is supplied with a Windows® software program, allowing data sets to be automatically downloaded to a PC computer where they can be processed or stored. It also permits remote control of the instrument.

Confidence in Instrument Performance

The PFX995/P is a rugged colorimeter with a fabricated steel housing, which is designed to function equally as a QC instrument within the laboratory or on 24 hour operation in a production environment. A diagnostic test routine and status report allows users to conduct periodic checks on the instrument or identify faults. For regular conformance testing the PFX995/P is also supplied with a certified glass filter of specified Saybolt value.

Tintometer - A Century of Excellence in Colour Measurement

Tintometer is recognised around the world as a leading supplier of equipment for colour analysis. Over the years the Lovibond® name which appears on its instruments has become a hallmark for colour measurement, acknowledged by the widespread use of Lovibond® systems in process industries.

TECHNICAL SPECIFICATION

Measuring principle	16 interference filters
Spectral response	420 - 710 nm
Bandwidth	20 nm
Repeatability	
- chromaticity (x y)	± 0.0002
- transmittance	± 0.25 %
- Saybolt values	± 1
Measurement time	Less than 25 seconds
Calibration	Single key press; fully automated
Light source	5 Volt, 10 Watt tungsten halogen lamp (lens ended)
Illuminant	CIE Illuminant A, C, D65
Observer	2°, 10°
Path length	0.004" - 6" (0.1 - 153 mm)
Interface	Parallel printer port, RS 232 port
Input voltage	Universal, via external power supply
Approvals	CE
Display	2 x 40-character, back-lit LCD
Keypad	21-key membrane keypad; washable polyester with audible feedback
Instructions	7 languages: English, French, German, Spanish, Italian, Portuguese, Dutch
Heater unit	Factory fitted option, 95°C max
Instrument housing	Fabricated sheet steel with tough, textured paint finish
Dimensions	Width 515mm, depth 195mm, height 170mm
Weight	7.75 kg

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