



Lovibond PFX950/P Petrochemical Tintometer



The Lovibond PFX950/P is a high precision spectrophotometer incorporating the core color scales for mineral oils and petrochemicals. It includes both Saybolt Color and ASTM Color, scales that are accepted internationally for oil analysis, as well as Platinum-Cobalt Color for oil derivatives and petrochemicals. Results can also be displayed in terms of CIE values and spectral data.

Color Scales *	Scope	Range	Resolution
Saybolt Color (ASTM D6045, ASTM D156, JIS K 2580)	Light colored petroleum products including aviation fuels, kerosene, naphthas, white mineral oils, hydrocarbon solvents and petroleum waxes	-16 (darkest) to +30 (lightest)	1
ASTM Color (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
CIE Values (ASTM E308)	X Y Z Tristimulus values, x y Y Chromaticity coordinates, CIE L*a*b* Color space; ΔE color difference	Defined by spectrum locus	-
Spectral data (420 - 710 nm)	Transmittance, (full spectrum & specified wavelengths)	0 - 100%	0.01%

Brings Precision and Reliability to Color Measurement

The accuracy, repeatability and reproducibility of data provided by the Lovibond PFX950/P allow for tighter color specifications and greater color consistency, giving companies the confidence needed to make important decisions regarding high value consignments and refining operations. When measuring Saybolt or Pt-Co Color of clear, water-white products, the long sample path length enables the PFX950/P to obtain precise color measurements, without multiplying errors.

Color Analysis made Simple

The Lovibond PFX950/P is an easy to use, automatic instrument, which eliminates time-consuming procedures of visual methods. 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.

Confidence in Instrument Performance



The PFX950/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 allows users to conduct periodic checks on the instrument or identify faults. For regular conformance testing the colorimeter is also supplied with a colored glass filter of known Saybolt value.

Optional Items for Individual Applications

Integrated heater unit

A factory fitted option to prevent heated samples such as waxes from solidifying in the cell.

Windows software for data capture on PC

Allows data sets to be automatically downloaded to a PC computer where they can be processed or stored.

Conformance filter sets

For quick and simple conformance checks, sets of graded glass filters, representing a spread of colors from the Saybolt, ASTM Color or Pt-Co scales, are available.

Certified color reference standards

Ideal for routine calibration and verification of test data.

TECHNICAL SPECIFICATION

Measuring principle	16 interference filters
Spectral response	420 - 710 nm
Bandwidth	20 nm
Repeatability	
- chromaticity (x y)	± 0.0002
- transmittance	$\pm 0.25 \%$
- 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 C
Observer	2°
Path length	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

The Lovibond PFX950/P is supplied complete with 2 optical glass cells (100mm & 33mm), a calibrated glass conformance filter, a spare lamp and instructions.