



## DC Scientific Glass



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

Color Scales *	Scope	Range	Resolution
Saybolt color (ASTM D6045, ASTM D156, JIS K 2580)	Light colored petroleum products including aviation fuels, kerosene, naphtha, 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
Lovibond RYBN (IP 17 Method A up to 6" path length)	Petroleum products in terms of Lovibond Red, Yellow, Blue & Neutral units	Red: 0 - 70 Yellow: 0 - 40 Blue: 0 - 3.9 Neutral	-
IP Units (IP 17 Method B)	Light colored products such as refined undyed motor fuel, white spirit or kerosene	Water White (0.25) to Standard White (4.0)	-
Gardner color (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)	X Y Z Tristimulus values, x y Y Chromaticity coordinates, L*C*h color space; CIE L*a*b* color space; Hunter L a b color space; ΔE color 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, 0.0001OD

Also keep us in mind for the complete line of colorimeters and color standards from Lovibond:





# Lazar Scientific, Inc.



## Certified Color Reference Standards for Oils, Fuels & Chemicals

These CRMs are ideal for routine calibration of color measuring instruments, verification of test data and ensuring good inter-laboratory or inter-instrument correlation. The range of liquid standards includes AOCS-Tintometer, ASTM, Gardner, Lovibond RYBN, Pt-Co and Saybolt Color, the key color scales applied to oils, fuels & chemicals.

They are supplied with full traceability to internationally recognized standards, either UKAS to ISO 17025 (ASTM, Gardner & Saybolt Color) or the ISO 9001 quality system (AOCS-Tintometer, Lovibond RYBN & Pt-Co Color). Each standard comes in a 500 ml bottle with a 12-month guarantee of color stability and full certification including MSDS.

### Key Benefits

- Ideal for routine calibration of color measuring instruments & verification of test data
- Ensure good inter-laboratory and inter-instrument correlation
- Applications in statistical quality control (SQC) and statistical process control (SPC)
- High stability standards with a guaranteed 12-month shelf life (3 months shelf life for Pt-Co)
- Full traceability to internationally recognized standards
  - Gardner & Saybolt Color standards certified under UKAS to ISO 17025
  - AOCS-Tintometer, Lovibond RYBN & Pt-Co Color certified under ISO 9001 quality system
- All classified as non-hazardous according to EU directives
- Each bottle supplied with full certification including MSDS

### Covers the Key Color Scales applied to Oils, Fuels & Chemicals

The range of Lovibond color reference standards includes AOCS-Tintometer, ASTM, Gardner, Lovibond RYBN, Pt-Co/Hazen/APHA and Saybolt Color, the key color scales applied to oils, fuels & chemicals. Each standard is supplied in a 500 mL bottle with a 12-month guarantee of color stability (3 months shelf life for Pt-Co). The values indicated are typical nominal values; individual values may vary but these are always specified on the certificate of calibration supplied with each standard.

### Excellence in Color Measurement

Process industries throughout the world use Lovibond colorimeters for color control of products such as edible and industrial oils, fuels, chemicals, paint vehicles and coatings. The Lovibond brand is recognized by major international standardizing bodies, including the AOCS, ISO and ASTM, who quote our equipment in their specifications for color measurement. It is this unparalleled knowledge that ensures good correlation with Lovibond colorimeters.

### Quality Assurance

Lovibond color reference standards are manufactured by Paragon, and certified by The Tintometer Limited. Each standard is issued with a Certificate of Calibration, which confirms that the product has been manufactured and tested under the control of Tintometer's ISO 9001 Quality Management System and conform in all respects with the stated standard or test method. In addition, Tintometer has been awarded UKAS (United Kingdom Accreditation Service) accreditation as a color calibration laboratory for spectral response and CIE measurements. As a result, we are able to supply reference standards for Saybolt, ASTM and Gardner Color that are directly traceable to internationally recognized standards and certified under UKAS by Tintometer to ISO / IEC 17025.

