

Lovibond® Colour Measurement

Tintometer® Group



Liquid Cell Holder

Spectrophotometer Accessories

For use with the Lovibond® RT400 & RT500 Spectrophotometer Series

The Lovibond^{fi} 400630 Liquid Cell Holder is a fixture designed specifically to hold a Lovibond^{fi} Optical Cell for liquid measurement by the Lovibond^{fi} RT400 & 500 Spectrophotometer Series. The Liquid Cell Holder attaches to the Lovibond^{fi} 400620 Benchtop Stand. The Liquid Cell Holder features a black chamber with a white ceramic backing that encloses the liquid-filled optical cell. The Lovibond^{fi} Liquid Cell Lid is provided to prevent spillage.

Liquid Cell Holder

Application Notes:

Measurements taken with the **Liquid Cell Holder** are intended for relative measurements comparing a standard and a sample batch. The fixed errors resulting from the thickness of the glass and translucency of the samples prevent comparison to an absolute reflectance standard.

Extreme care should be taken to prevent the sample liquid from being spilled on the instrument or in the instrument sphere, as this may void your warranty. NEVER FILL THE CELL WHILE IT IS IN THE HOLDER.

Care should be taken to ensure the liquid cell and the white ceramic backing are kept clean.

Cleaning and Handling Procedures:

- Carefully wash the *Liquid Cell Holder* or the *Liquid Optical Cell* in warm soapy water and rinse thoroughly.
- Never touch the white ceramic backing with your fingers. Finger prints may affect the measurement results.
- Never touch the cell windows with your fingers as the oils in your skin will etch the optical faces.
- Always leave an air gap between the bottom of the lid and the top of the liquid sample. The pressure of the lid against the liquid sample can cause the windows to weaken and crack.

Operating Instructions:

1. Verify that the *Liquid Cell* and the white ceramic backing on the *Cell Holder* are clean.
2. Remove the *Sample Clamp* from the *Clamp Arm*.
3. Place the *Liquid Cell Holder* into position on the *Clamp Arm* and press it on the end of the *Sample Clamp Adjustment Knob*.
(Fig 1)
4. Carefully fill the *Liquid Cell* with the sample liquid until it is approximately eight millimetres from the top of the cell.
5. Press the *Liquid Cell Lid* onto the top of the *Liquid Cell* until the lid flange rests against the cell (Fig 2). If there is any spilled liquid on the sides of the *Liquid Cell*, wipe it off with a clean cloth.
6. Place the *Liquid Cell* into the *Liquid Cell Holder* (Fig 3).
7. Perform a measurement.



Fig 1



Fig 2



Fig 3