

Optrode – Titration in a new light

Photometric sensor

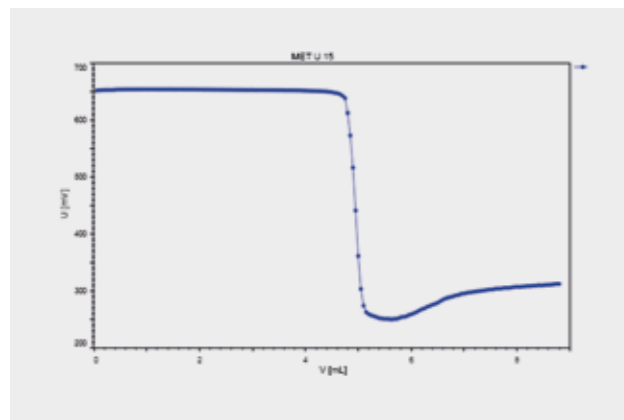
HIGHLIGHTS

- Eight wavelengths:
470, 502, 520, 574, 590, 610, 640 and 660 nm
- 100% solvent resistant
- Compact and space-saving

Photometric titration: benefits and applications

Titration with a photometric sensor is a widely used method of titration. It is based on color changes at the equivalence point and is used primarily when

- potentiometric determination of the equivalence point is not possible
- a standard method specifies photometric indication
- the lower costs of titration compared with more expensive methods (e.g. AAS, ICP-AES) matter
- simple and fast performance of measurements is important
- the end point of manual titration still has to be determined visually



Titration of chondroitin (USP) at 660 nm



Straightforward setting of the wavelength



a) Straightforward switching between eight wavelengths.



c) ... and the next wavelength is set already!



b) Simply touch the magnet symbol on the head of the electrode with the supplied magnetic stirring bar ...

ADVANTAGES OF THE OPTRODE

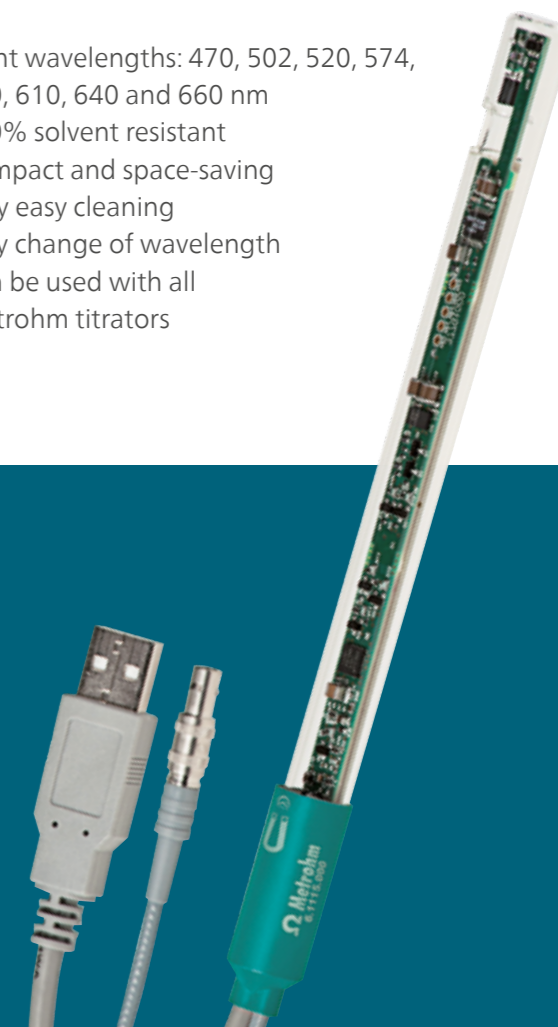
- Eight wavelengths: 470, 502, 520, 574, 590, 610, 640 and 660 nm
- 100% solvent resistant
- Compact and space-saving
- Very easy cleaning
- Easy change of wavelength
- Can be used with all Metrohm titrators

APPLICATION EXAMPLES

- Photometric titrations according to USP and EP (non-aqueous)
- Determination of the carboxyl end groups (non-aqueous)
- TAN/TBN according to ASTM D974 (non-aqueous)
- Chloride in silicone products (non-aqueous)
- Sulfate determination
- Fe, Al, Ca in cement
- Water hardness (total hardness and Ca/Mg)
- Chondroitin sulfate according to USP

HIGHLY COMPATIBLE DUE TO THE USB INTERFACE

Both new and existing titration systems can be used with the Optrode. Power is supplied directly via the USB port of a Metrohm instrument (Titrimo plus, Ti-Touch, Titrand, USB sample changer). In the case of models without a USB port, power can also be supplied via an optional USB power adapter.



ORDERING INFORMATION

Instrument	
6.1115.000	Optrode
Optional	
6.02117.000	Power supply unit USB 5 V/2.1 A (for power supply with Metrohm instruments without USB port)
6.02109.000	OMNIS adapter cable F/P

