

Waters Training Services

Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

“The will to win, the desire to succeed, the urge to reach your full potential... these are the keys that will unlock the door to personal excellence”

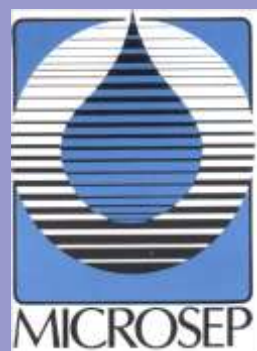
[Robinson, Eddie](#)



For either new or experienced professionals, our Waters® training modules provide you the knowledge and expertise you need to be successful.

Training Modules

Empower™ 2154	2-3
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Empower™ 2154 Software Essentials of the Quickstart Interface

This course demonstrates how to efficiently collect chromatographic data and generate results using Empower™ Software with QuickStart Interface. The instructor-led segments and practice exercises reinforce the skills needed for success.

Topics Covered

- Create instrument methods, method sets and sample set methods to run samples
- Develop processing methods
- Alter sample information
- Batch/background processing
- Find information
- Review results and calibration curves
- Modify existing report methods
- Summary exercise

Who should attend

New users of Empower™
Software who want to rapidly learn to use the QuickStart interface

Prerequisites

Attendees must be familiar with Windows XP Operating System

Duration

2 Days

Cost

R 3,382.00 exc. VAT

Part No.

WCDE01

Empower
™ 2154
Training
Modules

Using the PDA with Empower™ 2154 Software

This course provides the fundamental information needed to acquire, process and interpret PDA data using Empower™ 2 Software. Attendees work live in the software with example data. The instructor led segments and the exercises reinforce the concepts needed to become successful with the PDA and Empower 2 Software.

Topics Covered

- PDA Overview
- Guidelines for acquiring data with a variety of PDA detectors
- Reviewing PDA data
- Building a processing method
- Spectral Contrast Theory
- Peak Purity analysis
- Creating and working with spectral libraries
- Report methods

Who should attend

Empower™ 2 Software
users who want to rapidly learn to use the capabilities of the PDA detector

Prerequisites

Attendees must be familiar with **Empower™ 2154** Knowing how to work with 2-dimensional chromatographic data is **Empower™ Software is useful.**

Duration

1 Day

Cost

R 1,971.00 exc. VAT

Part No.

WCDE03

Empower™ 2154 Advanced Topics

This course teaches experienced Empower™ Software users how to customize the software to meet individual lab application needs, including organization, calculations, integration, quantitation and customizing reports

Topics Covered

- Using the Pro interface for setting up advanced features in Empower Software
- Understanding and establishing system policies for your environment
- Creating default strings for audit trail comments
- User management
- Acquisition servers and chromatographic systems
- Managing projects
- Organizing and accessing information in Empower Software
- Viewing and comparing methods versions
- Lock/unlock data channels
- Creating acquisition methods
- Using the review window
- Developing a processing method
- Altering sample information and batch/background processing
- Reviewing results and calibration curves
- Understanding custom fields
- Designing and creating custom fields
- Creating custom individual and summary reports
- Using overlay chromatograms and ordering tables

Who should attend

Experienced Empower™ Software users

Prerequisites

Attendees should have at least four months experience of Empower™ Software. Successful completion of the Empower™ Essentials would be highly recommended.

Duration

3 Days

Cost

R 5,074.00 exc. VAT

Part No.

WCDE02

Empower™

2154

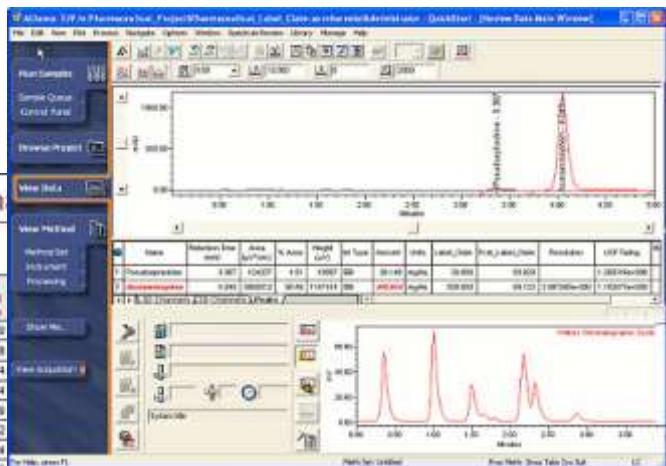
Training

Modules

Empower2 Cold Tablet - Label Claim An

% Label Claim Results by Peak
Component Name: Acetaminophen

	Component Name	Sample Name	Qty	Ref. Lis. e. (g/g)	Ave.	Am. std. (10000)	Label Claim	% Label Claim
1	Acetaminophen	04 T20820	1	4.047	8364190	8605	500.000	92.10
2	Acetaminophen	04 T20820	2	4.048	8374410	4809	500.000	92.18
3	Acetaminophen	05 T20820	1	4.048	8548944	4707	500.000	94.14
4	Acetaminophen	05 T20820	2	4.048	8503007	4682	500.000	93.84
5	Acetaminophen	04 T20820	1	4.047	8418821	4634	500.000	92.68
6	Acetaminophen	04 T20820	2	4.050	8401001	4826	500.000	92.52
7	Acetaminophen	05 T20820	1	4.048	8061136	4637	500.000	90.74
8	Acetaminophen	05 T20820	2	4.048	8095012	4656	500.000	93.13
	Mean			4.048		4594		91.5
	Std. Dev.			0.002		9.00		1.96
	%RSD			0.04		2.13		2.13



Basic HPLC troubleshooting with Lab



Waters Prep C80[®] columns

This course covers fundamentals chromatographic knowledge, offers a solid understanding of HPLC and provides the necessary information to help make informed choices about chromatographic experiments. Basic chromatographic troubleshooting is taught using examples of separation problems

Topics Covered

- Chromatographic primer
- HPLC terminology
- Introduction to detectors and columns
- Basic problems and troubleshooting

Who should attend

Beginner to intermediate chromatographers

Prerequisites

None

Duration

2 Days

Cost

R 3,774.00 exc. VAT

Part No.

TWLC01

General
Chromatographic
Topics

Fundamentals of HPLC with Lab

This course provides a comprehensive understanding of HPLC and the different liquid chromatography principles, techniques and separation modes. Included in this course are exercises that aid in the understanding of HPLC method development such as determining plate count and optimizing capacity factors and selectivity.

Topics Covered

- Understanding the basics of HPLC
- HPLC parameters
- Three modes of chromatography using examples of adsorption/partition, ion exchange (IEC) and size exclusion (SEC)
- Exploring gradient elution chromatography
- Understanding method development and performing it more effectively using method development strategies and steps, and by optimizing retention factor (k), selectivity (α) and plate count (N)
- Using quantitation and system suitability for accuracy and precision

Who should attend

Users who are new to HPLC or who need a review of the basic LC applications

Prerequisites

Attendees should have a basic knowledge of chemistry

Duration

3 Days

Cost

R 4,906.00 exc. VAT

Part No.

TWLC02



On-site Training

Most of these courses can be delivered at your location. On-site courses or programs that will address your specific needs can also be designed. We will work with you to develop a curriculum that meets your educational goals, costs and scheduling requirements.

Topics Covered

- Laboratory software
- UltraPerformance LC[®] chemistry, instruments and software
- Instrument operation and maintenance
- MS technologies
- General chromatography
- Compliance

Cost

The fee structure for on-site training is determined by the number of attendees, days of instruction and course content.

On-Site
Training



General Information

Certification

Candidates will be evaluated during and at the conclusion of training modules.

Certification of Attendance is issued.

Venue

Microsep (Pty) Ltd
2 Saturn Crescent
Linbro Business Park
Frankenwald Ext 30
Sandton

Registration

To permit full participation, registration is limited. Availability is in order of receipt of the completed registration form.

Cancellation

Cancellation must be confirmed prior to Schools commencement in order to avoid the following costs:

- 10 days prior 20% of training cost
- 5 days prior 50% of training cost
- No show on day 100% of training cost

Microsep reserves the right to cancel any Schools 10 days prior to commencement and will advise candidates accordingly.



Contact information

Waters Sales Secretary

Dates

Empower™ 2154 Software Essentials of the Quickstart interface Part Number: WCDE01 Price: R 3,382-00 Excluding VAT	16-17 Feb	13-14 April	15-16 April	17-18 Aug	19–20 Oct
Empower™ 2154 Advanced topics Part Number: WCDE02 Price: R 5,074-00 Excluding VAT	25-27 May	21-23 Sept			
Using the PDA with Empower™ 2154 Software Part Number: WCDE03 Price: R 1,971-00 Excluding VAT	18 Feb	19 Aug	21 Oct		
Basic HPLC and Troubleshooting with Lab Part Number: TWLC01 Price: R 3,774-00 Excluding VAT	8-9 March	3-4 May	2-3 Aug	4-5 Oct	
Fundamentals of HPLC with Lab Part Number: TWLC02 Price: R 4,90600 Excluding VAT	10-12 March	5-7 May	4-6 Aug	6-8 Oct	

Fax / e-mail the completed registration form to:

Company: Microsep (Pty) Ltd

Attention: Waters Sales Secretary

Fax no: 011 553 2400

E-mail: brenda.little@microsep.co.za



Please select course that you would like to attend

Empower™ 2154 Software Essentials of the Quickstart interface	16-17 Feb	13-14 April	15-16 April	17-18 Aug	19–20 Oct
Empower™ 2154 Advanced topics	25-27 May	21-23 Sept			
Using the PDA with Empower™ 2154 Software	18 Feb	19 Aug	21 Oct		
Basic HPLC and Troubleshooting with Lab	8-9 March	3-4 May	2-3 Aug	4-5 Oct	
Fundamentals of HPLC with Lab	10-12 March	5-7 May	4-6 Aug	6-8 Oct	

Company Details

Company Name

Postal Address

Postal Code

Tel

Fax

E-mail

Note

Please print clearly

Use a separate registration form for each delegate

Personal Details

First Name

Surname

Dietary Requirements

Vegetarian

Halaal

Order No.