



Training Course Agenda

Fundamentals of Lyophilization Training Course (PDA 157)

DAY 1

8:30 **Welcome and Introductions**

9:00 An Introduction to Lyophilization, The Freeze Drying Process – An Example

10:30 **Break**

10:45 Freeze Drying Equipment

12:00 **Lunch**

13:00 Basic Principles – Phase Diagrams

14:30 **Break**

14:45 The Freezing Process

16:00 **End of Day 1**

DAY 2

8:30 **Recap of Day 1**

9:00 Principles of Vacuum Technology

10:30 **Break**

10:45 Primary and Secondary Drying

12:00 **Lunch**

13:00 Phase Transition Determination, Freezing Techniques

14:30 **Break**

14:45 Finished Product Quality Attributes, Process Engineering

16:00 **End of Training Course**
