



Laboratory Chemical Inventory Management Fundamentals

Course Introduction:

This course is designed to provide participants with a comprehensive understanding of the principles, practices, and regulations related to managing chemical inventories in laboratory settings. As laboratories face increasing scrutiny regarding safety protocols and environmental compliance, mastering chemical inventory management becomes crucial for mitigating risks and optimizing resource utilization.

Throughout the course, participants will explore key topics such as regulatory requirements, inventory tracking methods, risk assessment, and best practices for chemical storage and disposal. By examining case studies and industry standards, attendees will learn how to implement effective inventory management systems that ensure the safe and responsible use of chemicals. This course aims to equip professionals with the knowledge and skills necessary to enhance their laboratory operations while maintaining compliance with relevant regulations and standards.

Course Objectives:

By the end of the program, participants will be able to:

- Understand the fundamental principles of laboratory chemical inventory management.
- Explore regulatory requirements and compliance standards for chemical inventories.
- Learn about various inventory tracking and management methods.
- Analyze risk assessment techniques for chemical handling and storage.
- Gain insights into best practices for chemical storage, labeling, and disposal.

Who Should Attend?

This course is intended for Laboratory managers and supervisors, Safety officers and compliance professionals, Chemical storage and handling personnel and Environmental health and safety professionals.

Course Outline:

Day 1: Introduction to Chemical Inventory Management

- Overview of chemical inventory management: definitions and significance
- Importance of effective inventory management in laboratory safety and compliance
- Key terminology and concepts in chemical inventory management

Day 2: Regulatory Compliance and Standards

- Overview of relevant regulations (OSHA, EPA, local regulations)
- Understanding Material Safety Data Sheets (MSDS) and Safety Data Sheets (SDS)
- Compliance strategies for laboratory chemical inventory management

Day 3: Inventory Tracking and Management Methods

- Methods for tracking chemical inventories: manual vs. automated systems
- Utilizing software solutions for efficient inventory management
- Implementing barcode and RFID technologies for tracking

Day 4: Risk Assessment and Safety Protocols

- Techniques for conducting risk assessments for chemical handling in labs
- Understanding the hierarchy of controls in chemical safety
- Developing safety protocols and emergency response plans for chemical spills

Day 5: Best Practices for Chemical Storage and Disposal

- Guidelines for proper chemical storage, segregation, and labeling
- Best practices for chemical waste disposal and recycling
- Case studies on successful chemical inventory management implementations

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work

Course Fees:

To be advice as per course location. This rate includes participant's manual, Hands-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session