

Safety Data Sheets for Engineers

Welcome to the Safety Data Sheets for Engineers course. In electronics manufacturing, chemicals are everywhere—from cleaning agents to conformal coatings—and mishandling them can risk health, safety, and production. This course equips engineers with the skills to read, interpret, and apply Safety Data Sheets (SDS) to make informed decisions that keep people safe and processes compliant.

You'll learn how to use SDS information to conduct process hazard analyses (PHA), identify chemical risks, design hazard-reduction strategies, and train employees effectively. The course also highlights guidance from IPC standards, OSHA's Hazard Communication Standard, the Globally Harmonized System (GHS), ANSI, EPA's TSCA, and the EU's REACH regulations.

By the end, you'll understand how to integrate SDSs into PHAs to protect personnel, ensure compliance, and strengthen operations through smarter chemical management.

COURSE OBJECTIVE

After completing this course, you will be able to use the key sections of a Safety Data Sheet (SDS) to conduct a process hazard analysis (PHA) and implement effective, compliant measures to mitigate chemical risks in electronics manufacturing.

LEARNING OBJECTIVES

- Describe each step in a process hazard analysis (PHA)
- Interpret Safety Data Sheets (SDS) to identify chemical hazards
- Use SDS data to design hazard-reduction measures
- Use each section of an SDS to complete a PHA
- Validate the effectiveness of a PHA
- Ensure your analyses meet regulatory requirements
- Identify methods to train employees on safety protocols

FINAL EXAM & CERTIFICATE OF COMPLETION

Once you have completed the course, you can take the final exam. You will have 60 minutes to answer 25 multiple-choice questions, and you must score at least 80% to pass. You are allowed to take the exam up to three times. If you need to attempt the exam a third time, you must wait 24 hours after finishing your second attempt. Participants who achieve a score of 80% or higher will be able to access and download their Global Electronics Association Certificate of Completion.

COURSE RESOURCES

Everything you need to successfully complete the Safety Data Sheets for Engineers course is included and available on the Electronics U Learning Management System.

ELECTRONICS U LEARNING MANAGEMENT SYSTEM

Upon accessing the course for the first time, make sure to take a moment to update your personal profile. Electronics U supports the most recent versions of Google Chrome, Firefox, Safari, Internet Explorer, and Microsoft Edge. Courses can be accessed on desktops, laptops, tablets, and mobile phones. Please refer to Browser Settings under the Start Here! Tab on your dashboard to make sure your browser is set to function seamlessly with the Electronics U Learning Management System. If you need further technical assistance, please send an email to support@electronicsu.org or call Global Electronics Association Member Support at +1 847-597-2862.