



DOT HAZMAT (4-Hour) Course Outline



Prerequisites: This course shall have no formal pre-requisite.

Course Length: 4 hours – Course length shall vary depending on the number of delegates. Total course time includes breaks.

Class Size: The maximum number of delegates that may be trained and tested per instructor shall be thirty-five (35) in the classroom session.

Course Objective

- Train employees on the Department of Transportation (DOT) shipping, labeling and transport requirements associated with hazardous materials, as required in 49 CFR 171-180.
- Delegates should be able to demonstrate knowledge of regulations and resources during written examination.

Course Design

- Power Point© / Lecture / Audio Video / Visual Aids
- Demonstrations

Successful Course Completion

- Requires a minimum score of 75% or better.
- Grades shall be calculated by dividing the number of questions answered correctly by the total number of exam questions.
- Delegates will have no more than thirty (30) minutes to complete the exam.

Course Content Summary

- Classroom

Breaks: 10 minutes (approximately every hour)

Lunch: 1 Hour (if applicable)

Course Outline

About HAZMAT

- Hazardous Material Transportation Act (HMTA)
- Hazardous Material Regulations
- Enforcement Authorities
- Penalties
- Hazmat Training Requirements
- HAZMAT Definitions
 - Hazardous Material

- HAZMAT Employee
- Cycle of Transportation
- Shipper
- Hazardous Substance
- Reportable Quantity (RQ)
- Marine Pollutant
- Hazard Classes
 - Class 1 – Explosives
 - Class 2 – Compressed Gases
 - Class 3 – Flammable Liquids
 - Class 4 – Flammable Solids
 - Class 5 – Oxidizers and Organic Peroxides
 - Class 6 – Poisonous and Infectious Materials
 - Class 7 – Radioactive Materials
 - Class 8 – Corrosive Materials
 - Class 9 – Miscellaneous Hazardous Materials
- Precedence of Hazard Table
- Video: HAZMAT Drivers
- Five Steps to HAZMAT Compliance

Step 1 – Classification

- Obtain Shipping Description
- Review the Hazardous Material Table
 - Column 2 - Material Description, Proper Shipping Name
 - Column 3 – Hazard Class/Division
 - Column 4 – Identification Numbers

Step 2 – Packaging

- General Packaging Requirements
- Review Hazardous Material Table
 - Column 5 – Packing Groups
 - PG I, II, III
 - Column 7 – Special Provisions
 - Column 8 – Packaging Requirements
- UN Specification Codes
 - Example on Box and Drum
- Performance Orientation Packaging Example

Step 3 – Marking/Labeling

- Marking Requirements
- Marking Examples



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- Labeling Requirements
- Labeling Examples
- Labeling Requirements cont.
- Additional Labels on Package
- Additional Container Markings

Step 4 – Shipping Papers

- General Requirements
- Shipping Paper Examples
- Additional Requirements
- Shipper's Certification
- Hazardous/Non-Hazardous Materials
- Accessibility
- Retention
- Emergency Response Information
- Emergency Response Guidebook
 - Define colored sections

Step 5 – Placarding

- General Requirements
- Placard Examples
 - Required Size
- Placard Determination
 - Non-Bulk
 - Bulk
- Placarding Empty or Unpurged Tanks
- Placard Location/Visibility
- Placard Flow Chart

HAZMAT Safety

- Loading/Unloading HAZMAT
- Review HAZMAT Segregation Charts
- Carrier Requirements
 - Highway
 - Air
 - Rail
 - Water
- Vessel Segregation Chart



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Course Outline



HAZMAT Security Awareness

- Training Requirements
- Awareness
- Recognition
- Potential Targets
- Security Risks
- Security Checklist
- Security Plans

Practical Session

While there is no formal practical session for this course, table top exercises are conducted.

Training Center Provided Material

- Course Materials
- HAZMAT Table
- NAERG
- Sample Bills of Lading

Delegate Requirements

- None

Reference Material / Documents

DOT 49 CFR 171-180