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Subj: Transport of Automotive Hazardous Materials for Parts Technicians & Analysts (HMT-0433)

This web-based training course was developed by ShipMate, Inc., in cooperation with the Coordinating Committee For Automotive Repair (CCAR) and The North American Automotive Hazmat Action Committee (NAAHAC).

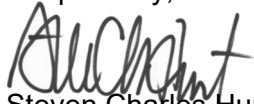
This course is intended for those persons and facilities that receive, handle or ship automotive hazardous materials by surface transportation. This course fulfills the U.S. Department of Transportation's hazardous materials transportation training requirements for: (1) general awareness and familiarization; (2) general safety; (3) hazardous materials security awareness; and (4) function-specific training for the following transportation and pre-transportation functions:

- determining the hazard class of a hazardous material;
- selecting a hazardous materials packaging;
- filling a hazardous materials packaging;
- securing a closure on a filled or partially filled hazardous materials package;
- marking a package to indicate that it contains a hazardous material;
- labeling a package to indicate that it contains a hazardous material;
- preparing a shipping paper;
- providing and maintaining emergency response information;
- reviewing a shipping paper to verify compliance with the HMR;
- certifying that a hazardous material is in proper condition for transportation in conformance with the requirements of the HMR;
- providing or offering placards to a surface carrier to indicate that it contains a hazardous material; and

You should print and maintain a copy of this course syllabus and overview on file at your facility. It is recommended that you provide a copy of this document in the event of a regulatory agency (e.g., DOT) inspection.

If this course does not address all of the hazardous materials transportation or pre-transportation functions that you perform, or if you have any questions regarding this or other hazardous materials training programs, or need any assistance, please call the course authors, ShipMate, Inc. at +1 (310) 370-3600.

Respectfully,


Steven Charles Hunt
ShipMate, Inc.

Web-Based Training (WBT)**Transport of Automotive Hazardous Materials for Parts Technicians & Analysts (HMT-0433)**

Module 1	Introduction
Lesson 1	Hazardous Materials Overview
Lesson 2	Consequences
Lesson 3	Responsibilities
Lesson 3	Training
Lesson 4	Regulatory Authorities
	Federal Aviation Administration (FAA)
	Federal Railroad Administration (FRA)
	Federal Motor Carrier Safety Administration (FMCSA)
	Pipeline and Hazardous Materials Safety Administration (PHMSA)
	United States Coast Guard (USCG)
Lesson 5	Regulatory Requirements Overview
	49 CFR subchapter C
Lesson 6	HM Table
Module 2	Classification
Lesson 1	Accident History
	Texas City, TX – 1947
	Bhopal, India – 1984
	ValuJet 592 – 1996
	FedEx 1406 – 1996
	UPS 1307 - 2006
Lesson 2	Physical & Chemical Properties
	Explosive
	Corrosive
	Flammable
	Combustible
	Reactive
	Radioactive
	Toxic
	Elevated Temperature
	Elevated Pressure
Lesson 3	International Classification
	Class 1 – Explosives
	Class 2 – Gases
	Class 3 – Flammable Liquids
	Class 4 – Solids
	Class 5 – Oxidizers & Organic Peroxides
	Class 6 – Toxic Materials
	Class 7 – Radioactive Materials
	Class 8 – Corrosive Materials

Class 9 – Miscellaneous Dangerous Goods

Module 3**Automotive Hazardous Materials**

- Lesson 1 International Classification
 - Class 1 – Explosives
 - Class 2 – Gases
 - Class 3 – Flammable Liquids
 - Class 4 – Solids
 - Class 5 – Oxidizers & Organic Peroxides
 - Class 6 – Toxic Materials
 - Class 7 – Radioactive Materials
 - Class 8 – Corrosive Materials
- Lesson 2 Electrical System
 - Battery
 - Speakers
 - Cable Cutters (Battery Disconnects)
- Lesson 3 Fuel System
 - Fuel Pumps, Injectors & Rails
 - Fuel Lines
 - Fuel Pressure Regulators
 - Charcoal Canisters
 - Gas Tanks, Filler Necks & Gas Caps
- Lesson 4 Power Train
 - Engines
- Lesson 5 Passenger Safety
 - Air Bag Modules
 - Driver-Side Airbags
 - Passenger-Side Airbags
 - Side Impact (Thorax) Air Bags
 - Knee Bags
 - Air Curtains
 - Seat-Belt Pretensioners
- Lesson 6 Steering & Suspension
 - Accumulators
 - Brake Boosters
- Lesson 7 Paint & Body
 - Lift Gate Supports
 - Windshield Washer Fluid (concentrate)
 - Paint & Paint Related Materials
 - Adhesives & Coating Solutions
- Lesson 8 Accessories
 - Flares
 - Fire Extinguishers
 - Tire Inflators
 - Cleaning Compounds

After-Market Auto-Care Products

Module 4 Hazard Communication

- Lesson 1 Marking
 - Proper Shipping Name(s)
 - Technical & Chemical Name(s)
 - Identification Number
- Lesson 2 Labeling & Marking
 - Hazard Warning
 - Cargo Handling
 - Orientation Arrows
 - Cargo Aircraft Only
 - Special Marks
 - Excepted Quantities Mark
 - Overpack Mark
- Lesson 3 Package Marking & Labeling
 - TULIP
- Lesson 4 Overpacks, Unit Loads & Cages
 - Unit Loads
 - Cages
 - Overpack
 - PILOT
- Lesson 5 Limited Quantities
 - Hollow Diamond (ground, ocean)
 - Limited Quantity Mark (air)
- Lesson 6 Consumer Commodity Changes
- Lesson 7 Excepted (Small) Quantities

Module 5 Lithium Batteries and Hybrid & Electric Vehicles

- Lesson 1 Nomenclature
 - Lithium Metal vs. Lithium Ion
 - Cells vs. Batteries
 - Contained-In vs. Packed-With Equipment
- Lesson 2 Vehicles
 - Vehicles vs. Equipment
 - Hybrid vs. Electric Vehicles
 - Fuel Cell Hybrid Vehicles
- Lesson 3 Fully Regulated Lithium Batteries
 - Lithium Metal Cells
 - Lithium Metal Batteries
 - Lithium Ion Cells
 - Lithium Ion Batteries
- Lesson 4 Lithium Cell & Battery Packaging
- Lesson 5 Excepted Lithium Cell & Battery Shipments

	Small Lithium Metal Cells & Batteries
	Medium Lithium Metal Cells & Batteries
	Small Lithium Ion Cells & Batteries
	Medium Lithium Ion Cells & Batteries
Lesson 6	Lithium Batteries/Cells Packed with Equipment
Lesson 7	Lithium Batteries/Cells Contained in Equipment
Lesson 8	Damaged or Defective Batteries

Module 6 Packaging

Lesson 1	Forces Encountered in Transportation
Lesson 2	UN POP Marking Manufacturer Marks
Lesson 3	DOT Marking Cylinders
Lesson 4	Non-Specification Packaging ('Strong' Outer Packaging)
Lesson 5	Manufacturers Symbol (Box Maker's Certificate – BMC) Burst Strength Edge Crush Test
Lesson 6	International Symbols
Lesson 7	Packing
Lesson 8	Damaged Packaging Packaging Evaluation Repackaging

Module 7 Documentation

Lesson 1	Shipping Paper Basic Description Required Information
Lesson 2	Substance Basic Description Sample Basic Descriptions
Lesson 3	Additional Descriptive Information
Lesson 4	Emergency Response Information Emergency Response Telephone Number Emergency Response Information ERT Service Providers
Lesson 5	Sample Shipping Papers
Lesson 6	Carrier-Specific Requirements
Lesson 7	Recordkeeping Requirements Additional Requirements Will-Call Orders

Module 8 Handling & Transportation

Lesson 1	Safety Data Sheets
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- Lesson 2 SDS Requirements
Availability
Safe Handling Procedures
Storage

Module 9 Emergency Response

- Lesson 1 Initial Response Actions
Reporting & Notifications
- Lesson 2 Spill Response Procedures
Spill Control
Spill Treatment
Spill Safety
- Lesson 3 Spill Response Equipment
- Lesson 4 Reports & Notifications
Management
911
National Response Center
DOT Form F5800.1

Module 10 HM Security

- Lesson 1 A History Lesson
- Lesson 2 HM Security Awareness
- Lesson 2 HM Security Plan Requirements
Personnel Security
Site Security
En Route Security
Reporting